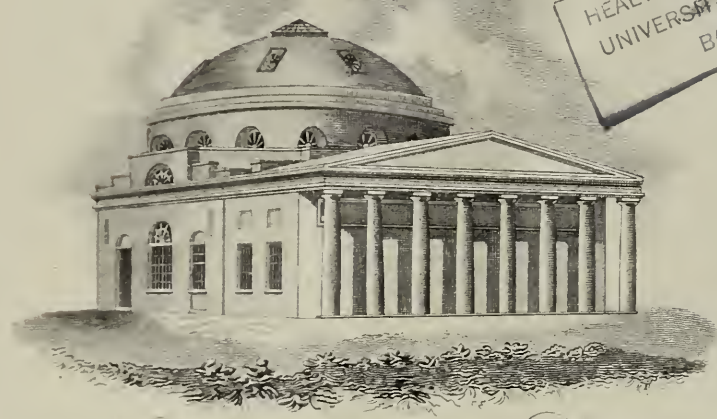


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THE JOURNAL

OF THE

Indiana State Medical Association

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION
OF INDIANA

Issued Monthly

Under the Direction of the Council

ALBERT E. BULSON, M.D.

Editor and Manager

OFFICE OF PUBLICATION

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VOLUME XXIII

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NUMBER 1

ORIGINAL ARTICLES

CUTANEOUS TUBERCULOSIS AND GENERAL MEDICINE*

FRANCIS EUGENE SENEAR, M.D.,
CHICAGO

During the past few decades the subject of cutaneous tuberculosis has become increasingly important, not alone for the dermatologist but likewise for all practitioners of medicine. In this field great strides have been made since 1884, when even lupus vulgaris was not universally accepted as a form of tuberculosis.

At the present time the various skin diseases due to or associated with tuberculosis are divided into two groups. The first of these include those manifestations which are generally recognized as caused by the tubercle bacillus, with a pathological picture not differing materially from tuberculosis elsewhere in the body. Included here are lupus vulgaris, scrofuloderma or tuberculosis colliquitiva, tuberculosis verrucosa cutis and tuberculosis cutis orificialis. Every medical practitioner is familiar with these disorders and aware of their significance, and nothing further need be said about them at this time.

The second group, however, is of much greater interest. Many physicians are more or less unfamiliar with the disorders in this group, or unimpressed with their diagnostic value, and for this reason this rather poorly defined group is deserving of greater consideration in every field of medicine. For some years a number of cutaneous disorders had been observed in which some writers felt that there was a connection with systemic tuberculosis, but it was not until 1896 that these conditions were placed in a group by Darier, who suggested for them the general title of tuberculides. The diseases in this group did not conform at all to the picture of recognized cutaneous tuberculosis as seen in the diseases mentioned above. The tuberculides had certain features in common, the main ones being a benign course, tendency to spontaneous cure, wide and symmet-

rical disposition, tendency to recurrence in successive crops without fever and a varied histologic picture often suggestive of tuberculosis. The Koch bacillus is almost always absent from the lesions, and inoculation of the guinea pig is rarely successful.

The list of conditions now classed among the tuberculides has grown to be an imposing one, some twenty-five disorders being included. In the case of many of the diseases so listed a connection with tuberculosis is largely theoretical and there is no actual evidence of such an association. With others, however, a tuberculous origin is demonstrable, and it is with these latter that we wish in large part to concern ourselves today.

The diseases which are generally accepted as proven tuberculides, at least in many instances, are four in number: erythema induratum, lichen scrofulosorum, the papulonecrotic tuberculides, including acnitis and folliclis, and the sarcoids, but two other conditions are of equal interest; lupus erythematosus and erythema nodosum.

Erythema induratum, a chronic recurring disorder, usually involves the skin of the calves of young persons, most often girls, beginning with hard, deep-seated hypodermic nodes or plaques of bluish-red color, which may ulcerate later. This disorder is most commonly mistaken for syphilis or erythema nodosum.

Lichen scrofulosorum occurs principally in tuberculous infants and children up to the age of puberty, and presents clinically an eruption of pinpoint to pinhead sized follicular papules, pinkish or reddish and later brownish and scaling, with a marked tendency to form groups.

The papulonecrotic tuberculides, acnitis and folliclis, occur as follicular papules or nodules of granular consistency, which tend to develop central necrosis, so that upon involution they leave small whitish atrophic scars, corresponding to the area of necrosis, surrounded by a zone of pigmentation. Acnitis is seen upon the face and the more superficial folliclis chiefly on extremities. The two disorders frequently coexist.

Three types of sarcoid related to tuberculosis have been described, the multiple benign type of Boeck, the subcutaneous sarcoid of Darier-Roussy,

*Presented before the Section on Medicine at the annual session of the Indiana State Medical Association held in Evansville, September, 1929.

and the erythema induratum-like sarcoid of the extremities, but the latter is now looked upon as actual erythema induratum. The multiple benign variety is characterized by the appearance of a variable number of sharply defined, yellowish, reddish or brownish nodules or plaques on the face or extremities or both, involving the cutaneous and subcutaneous tissues. The Darier-Roussey sarcoid presents rounded or oval, subcutaneous, hazel nut to walnut sized tumors of normal skin or dull to purplish red color, usually seen upon the trunk.

It is thus apparent that these tuberculides present a wide variety of clinical pictures, but not infrequently more than one of the types are present in the same patient, and it is felt that they have much in common, from the etiologic aspect, although their genesis has long been and still is a subject of discussion. It was at first thought that the skin lesions were due to toxins of the tubercle bacillus elaborated in foci elsewhere in the body and transported to the skin by the blood stream, and the group was at that time designated as toxituberculides. Later it was suggested that these eruptive manifestations were produced by dead organisms or those of attenuated virulence, thus accounting for the lack of a characteristic tuberculous histologic picture. It was not until 1914 that Rist and Rolland advanced the theory which is now rather generally accepted. As the result of a series of investigations, they decided that the tuberculides were due to tubercle bacilli of the usual degree of virulence, but that the affected individual, as the result of a visceral tuberculosis antedating the cutaneous involvement, had developed in the skin a state of allergy toward the tubercle bacillus. Consequently, the organisms, when carried from the visceral focus to the skin via the blood stream, are rapidly destroyed by the sensitive skin. This reaction produces the various types of tuberculides in which the histopathological picture, according to the rapidity of the reaction in the skin, varies from that of a typical tuberculous structure to a purely non-specific one. In brief, they regarded the tuberculides as spontaneous examples of Koch's phenomenon resulting from endogenous inoculation of the skin, and the destruction of the bacilli by this means is believed to account for the spontaneous healing of the tuberculides and for the infrequency with which the tubercle bacilli are found in the lesions. This latter point is of interest, for recently it has been shown that if the very early lesions are selected, *i. e.*, those in which the allergic reaction has not advanced to the point of destruction of the organism, the proportion of positive findings will be greatly increased. As Wise has aptly pointed out, the variations in form and type of eruptions provoked by the tubercle bacillus seem to depend on three factors: (1) the individual disposition of

the patient, (2) the number of bacilli circulating in the blood stream, and (3) the degree of immunity reaction residing in the affected organism.

The importance of these eruptions from the diagnostic standpoint is the point which we wish to emphasize particularly, but a study of the literature shows that they have received little attention from others than pediatricians, dermatologists, and those directly interested in tuberculosis, although the observations of these are significant. Tilesen found that in thirty-two cases of tuberculosis in children in the first three years of life, seven, or twenty-one percent, had an eruption of the folliclis or acne scrofulosorum type, the patients suffering from tuberculosis of the bones, lymph nodes, lungs, intestines, meninges or peritoneum. Miliary tuberculosis was found in all of these children who came to autopsy. This writer recovered the tubercle bacillus from the skin lesions in five of his seven patients. Leopold and Rostern found tuberculides in forty percent of thirty cases of tuberculosis occurring in infants, while Hempelman found tuberculides in thirty (23 percent) of 130 cases of pulmonary tuberculosis among children under two years of age. In all of the cases there were lesions of papulonecrotic type, while in five lichen scrofulosorum was present as well. The subsequent histories of forty children whom he had seen suffering with tuberculides showed that thirteen had died, eleven in the first year of life and two in the second year. Wronker states that he has made it a practice in every child with a history of chronic cough, frequent colds, loss of weight, pallor, intermittent, recurrent or continuous fever, or generalized glandular involvement, to look for papulonecrotic tuberculides, and he asserts that whenever he has found them he has been able to make a diagnosis of tuberculosis. He believes that if this method is followed more cases of tuberculosis will be recognized before the disease has progressed to the advanced stage, allowing a reduction of infant mortality from the disease. Of his nine cases with tuberculides, in all of which he was led to the diagnosis of tuberculosis by the eruption, four patients died, two were still living, two had been lost sight of and one was still under observation. He regards the prognosis of tuberculosis in infants as bad when tuberculides are present, as the patients so frequently develop miliary tuberculosis.

Sales has much the same opinion and feels that the outcome depends on the age of the patients. He believes that the tuberculides usually signify a fatal outcome in those less than one year of age. In those above one year of age and particularly in those above two years of age, a proportion of the cases end in death as a result of miliary tuberculosis, while in other cases, particularly in adolescents, they do not offer any certain index as

to prognosis but should serve to awaken distrust.

While these statements have dealt with tuberculides in childhood, Stokes has reported that, in his experience, lichen scrofulosorum had been seen more frequently among adults in association with pulmonary tuberculosis and especially with tuberculous arthritis but practically never with tuberculous glands, which are accompanied much more frequently by papulonecrotic lesions. This writer emphasized the importance of the tuberculides in general medical diagnosis and also called attention to their value in determining the effectiveness of surgical procedures for extirpation of a tuberculous focus, in detection of a tuberculous focus in eye conditions and in unraveling obscure ill health in women. He also called attention to the importance of a septic, nontuberculous factor which he feels is not infrequently involved in the production of tuberculides, temporary or permanent improvement following the removal of the focus furnishing this accessory factor.

He investigated thirty cases of papulonecrotic tuberculides, eighty percent of the patients being women. More than one-third of the patients had been previously diagnosed as tuberculous. Fifty-seven percent of the cases showed incontrovertible systemic objective evidence of tuberculosis, thirteen percent had disputable signs and thirty percent presented no definite signs. Glandular involvement was the commonest form of tuberculosis associated with these tuberculides. He stated that erythema induratum and papulonecrotic tuberculides may in a way be accepted as evidence of a benign course of the disease, signifying a high individual resistance.

As evidence of the general failure of recognition of these lesions, it is interesting to note that in only five of his thirty cases had a correct diagnosis been made previously, and tuberculosis suspected on the score of the cutaneous manifestations. Hayes, reporting three cases of papulonecrotic tuberculide, two of them in patients with active pulmonary tuberculosis, also called attention to the fact that each of the patients had been seen by a number of physicians whose work was devoted largely to tuberculosis and the lesions diagnosed as anything from simple dermatitis to syphilis and leprosy.

In recent years, and particularly abroad, much attention has been given to a possible relationship of erythema nodosum and erythema multiforme to tuberculosis. So much evidence has been accumulated that one cannot ignore the two conditions, particularly erythema nodosum, from this standpoint. Willan, in 1798, was probably the first to notice a connection between erythema nodosum and tuberculosis, as he called attention to the fact that tuberculosis occasionally follows an attack of this eruption. Uffelman, in 1876, again called attention to their clinical association, and Poncet,

in 1902, demonstrated a case of erythema nodosum which he considered of tuberculous origin. In 1905 Pons showed giant cells in sections of a nodule of erythema nodosum and also called attention to the development of typical nodules in an individual after a diagnostic dose of tuberculin. Hildebrandt was able to produce generalized tuberculosis in a guinea pig by injecting blood from a patient suffering with erythema nodosum, but this patient had chronic tuberculosis. Brian overcame this objection when he produced tuberculosis in three guinea pigs by injecting blood from a patient who had erythema nodosum but who had no clinically demonstrable tuberculosis. Landouzy described erythema nodosum occurring in a case of tuberculous septicemia, and later a case in which the cutaneous disorder was associated with joint pains and clinical endocarditis and in which a single acidfast bacillus was found in the lumen of a vessel in one of the lesions, while guinea pig inoculation was positive. He concluded that erythema nodosum might result from a septicemia with the tubercle bacillus.

Pollak, in 1912, studied forty-two cases of erythema nodosum seen during a two-year period. All the patients were children of one to thirteen years. All gave strongly positive reactions to tuberculin, yet the ages of the children were not such that one would expect to find tuberculosis frequently. The tuberculin tests performed weeks and months later again gave positive responses. In three of the cases definite tuberculosis developed within three to ten months. In some of the other cases there was already evidence of phlyctenules and tuberculosis of the bones. This writer stated that the only link missing to prove a definite connection was the demonstration of the tubercle bacillus.

Moro opposed Pollak's conclusion that erythema nodosum is a definite tuberculous disease of the skin which, in childhood at any rate, occurs only in tuberculous patients, but added evidence to show that some relationship existed between the two diseases. He recalled that he first demonstrated this experimentally in 1908 when, immediately after rubbing a tuberculin ointment on the skin of the chest of a tuberculous individual, he had seen erythema nodosum develop on the feet.

Savolin thought there were two possible relationships between erythema nodosum and tuberculosis; *i. e.*, that erythema nodosum might be simply a manifestation of tuberculosis, or that erythema nodosum of other origin might stir a latent tuberculosis into activity. Symes found distinct evidences of tuberculosis in six of twenty cases of erythema nodosum and concluded that the latter disorder might be a concomitant of some chronic tuberculous lesion of the lungs, joints or glands, probably having a toxic origin, or that

it might represent an actual invasion of the skin by the tubercle bacilli or, finally, might be a prodromal sign of an acute tuberculous septicemia, usually terminating in a fatal meningitis.

Ernberg followed the histories of thirty-five children whom he had seen with erythema nodosum in an attempt to determine their subsequent fate. Of these patients, seen between 1908 and 1914, he was able to examine thirty-one personally during 1916 and 1917. In not a single case had rheumatic fever or other signs of rheumatism developed, while in thirteen cases symptoms of tuberculosis had supervened and one patient had died of miliary tuberculosis. In most of the thirteen patients affected the tuberculous involvement had begun during the first months or year following the appearance of the erythema nodosum. This writer was unable to demonstrate the tubercle bacillus in four attempts and guinea pig inoculations were likewise negative. He believed that erythema nodosum occurs relatively early in the course of tuberculosis and that it probably represents the reaction of the body to autogenous tuberculinization.

Vetlesen reported that 5.1 percent of patients with pleurisy had previously had erythema nodosum, while 0.9 percent of patients with other manifestations of tuberculosis had had the disorder. As a result of his experience he regarded erythema nodosum as a danger signal. Symes, in 1923, stated that in his experience 10 percent of all cases of erythema nodosum show tuberculous disease. He followed the after-history of his patients up to fifteen years after the eruption of erythema nodosum and found none who developed tuberculosis. He felt that if the disease occurs in association with tuberculosis it either occurs in the course of chronic tuberculous infection, or that if the rash is followed in a few weeks by an outburst of acute tuberculosis, there probably was an old focus of the latter trouble, as shown in the case reported by him. He stated that when erythema nodosum occurs in tuberculous patients it presents certain distinctive characteristics; viz., the nodules occur in unusual places, are smaller and more persistent and may leave slight dimpling, the fever is of longer duration and the illness is more severe, while arthritis is not common. He did not question the frequent association of the two conditions, but stated that it remains to be determined whether erythema nodosum predisposes to tuberculosis, or whether the latter increases the susceptibility to erythema nodosum. The more common sequence of events is either that the symptoms of both disorders arise simultaneously, or erythema nodosum occurs in patients with chronic tuberculosis, while less commonly erythema nodosum occurs first and is followed by tuberculosis. In the latter instance a fatal ending through meningitis is frequent. He urged that

patients suffering with erythema nodosum be given better care than has been the rule in the past, that they be allowed a long period in which to recover their health, and that open air methods of treatment and extra feeding be employed, with examination of each patient for evidence of tuberculosis.

Foerster, Stokes, Meara and Goodridge, and a number of other writers have likewise added records of the association of these two disorders, so that whatever one's conception of their relationship may be the evidence is so convincing that in every case of erythema nodosum the patient should be examined and observed for symptoms or signs of tuberculosis.

With regard to erythema multiforme, the testimony is less abundant but nevertheless suggestive, particularly in view of the recognized relationship between erythema nodosum and erythema multiforme. Stokes recently called attention to this phase of the subject and also discussed the significance of purpura as an occasional indicator of tuberculosis in the affected individual.

Goeckermann has recently made an exhaustive study of the group of sarcoids and feels that they can probably be accepted as produced by the bacillus of tuberculosis. He recognizes that other cases may simulate sarcoid, but believes that they can be excluded on histological grounds. He finds that the associated tuberculous conditions are most commonly infiltrations of the finer bronchioles and fibrocystic changes of the bone.

The last of the diseases to be mentioned is lupus erythematosus, a disorder seen more frequently than any of the others which have been discussed. Opinion in regard to its dependence on an underlying tuberculosis has varied from time to time. A number of writers have felt that lupus erythematosus is always due to tuberculosis, others that tuberculosis was causative only in a variable proportion, while a few have denied any connection with tuberculosis. The opinion held by the majority of observers at present is that this disease is due to a toxic or septic infection, probably of multiple origin, but all concede that it occurs, particularly in the acute disseminated type, in tuberculous subjects.

The following case reports illustrate the diagnostic value of tuberculides:

Case One: Miss A. C., aged twenty, Mexican, factory worker, was admitted to the Educational and Research Hospital of the University of Illinois, complaining of swelling of the legs and feet and of tender nodules upon the legs. She stated that she became short of breath following slight exertion and became easily fatigued. For the past eighteen to twenty-four months she had had an intermittent dry cough. The family and past history were uneventful. The swelling of the legs

had been noticed for the past two years, but only two months before her admission she had developed a reddish nodule on the left calf. Within a short time numerous other nodules had developed and the entire lower third of each leg had become cyanotic in appearance. A few nodules had also developed on the right leg.

The patient was a well-nourished young woman of stocky build. Physical examination revealed no evidence of pulmonary tuberculosis, and the physical findings otherwise, exclusive of the cutaneous lesions, were negative except for some evidence of chronic tonsillar infection. The clinical picture presented typical erythema induratum on the calves and sides of the legs, with papulonecrotic tuberculides on the anterior surfaces.

During her stay in the hospital the patient was studied carefully for evidence of visceral tuberculosis. In corroboration of the physical findings, roentgen ray examination of the lungs showed no evidence of tuberculosis. The Pirquet test was strongly positive. Five sputum examinations were carried out with negative results, but on the sixth attempt and following the administration of potassium iodid, tubercle bacilli were demonstrated. During the patient's stay of six weeks in the hospital there was no noticeable elevation of temperature, but the afternoon temperature was consistently higher than that of the morning. In addition to rest in bed, the patient was given injections of neoarsphenamin at weekly intervals during her stay in the hospital, and at the time of discharge the lesions on the legs had disappeared, leaving only stains and pigmented spots. She returned in October, 1926, at our request, and stated that she had followed the advice given as to her mode of living. There had been no recurrence of the cutaneous lesions. Physical examination of the chest was again negative, but the Pirquet reaction was still strongly positive.

This case illustrates well the manner in which tuberculides may be the only thing which brings a tuberculous individual in contact with the physician.

Case Two: Helen T., a Greek child aged seven and a half, was admitted to the orthopedic service of the hospital because of a swollen left knee. The history showed that eight months before her entry there developed a painless, red, indurated swelling on the outer side of the left ankle, just below the malleolus. This remained unchanged for six months, when it became ulcerated. In July, 1926, several nodules of reddish to purplish hue developed on the calf of each leg. Some of these broke down later, and eventually healing took place with involution of all of the lesions excepting a single plaque on the right calf, and pigmented stains and scars remained. About the same time there developed over the anterior surfaces of the legs a number of pinhead to split pea sized

lesions, which became crusted at the center, and most of them healed spontaneously. In October, 1926, there developed a marked but painless swelling of the left knee and two days before her admission to the hospital a pinpoint opening had appeared in the skin of the swollen knee, from which a small amount of thin, yellowish fluid had drained.

The patient was a fairly well nourished child. Physical examination revealed hypertrophied tonsils and adenoids and a moderate cervical and inguinal adenopathy. Examination of the lungs gave negative results, as did roentgen ray examination. The Pirquet test was strongly positive and the Wassermann and Kahn tests negative. The left knee was greatly swollen and just to the left of the patella was a pinhead sized opening from which a thin, clear, straw-colored fluid could be expressed. Skiagrams of the knee and ankle showed no evidence of bone or joint pathology, but from the clinical standpoint the condition of the knee was regarded as typically tuberculous. The cutaneous manifestations varied. The lesion on the left ankle was an irregularly outlined ulcer with undermined edges and a zone of slightly infiltrated skin of deep cyanotic hue was about it. The small opening in the skin over the left knee, during her stay in the hospital, became surrounded by a zone of purplish infiltration, grew larger and eventually formed an irregular ulcer about one inch in length and half an inch in width. With motion of the knee the discharge described above could be seen welling up from the deeper tissues. Both of these ulcerative lesions were typical of scrofuloderma. The skin of the calves showed a number of pigmented spots and scars resulting from recently involuted lesions, but on the right calf was a hen's egg sized, fairly thin, irregular but roughly oval shaped, bluish plaque of infiltration, with some crusting covering it, the result of recently involuted superficial ulcers. This patch corresponded to erythema induratum in every detail, and it may be presumed that the lesions in this location which had involuted were of the same type. On the lateral and anterior aspects of the legs were several split pea sized, firm papules, with necrotic centers, characteristic papulonecrotic lesions. Over the lower part of the abdomen and thighs were a large number of discrete, sparsely distributed, follicular, acuminate, pinpoint to pinhead sized reddish papules, the older of which had become brownish and were covered with scale crusts. Some of these lesions had likewise involuted, leaving pigmented spots. Here we were dealing with acne scrofulosorum.

During her stay in the hospital the patient had an irregular but pronounced rise in temperature during the late afternoon. This patient is again under observation with an extensive fresh attack

of erythema induratum and folliclis, with new lesions of scrofuloderma.

This case is of interest because of the variety of cutaneous manifestations of tuberculosis present. In addition to a true tuberculosis of the scrofuloderma type, she presented three forms of tuberculides—erythema induratum, folliclis, and acne scrofulosorum, all dependent apparently upon tuberculosis of the left knee and ankle.

Case Three: A colored woman, aged twenty-three, was admitted to the clinic complaining of lesions on the legs. She stated that these lesions had been present for the past six months. Upon examination the posterior aspects of the legs showed a number of deep seated, hard, subcutaneous nodules, varying from the size of a hazelnut to that of a walnut. Nearly all were intact, with the overlying skin attached and darker in color than the normal skin; but two of them had broken down and showed rather shallow, irregularly outlined ulcers and a purulent discharge. The legs also showed a number of scars from spontaneously healed lesions. In addition there were two nodules on the inner surface of the right forearm. The overlying skin was attached and the nodules corresponded in every way to those on the legs. Biopsy specimens from one of the ulcerated lesions on the leg showed only slight chronic inflammation of the cutis, with notable perivascular infiltration, but sections from one of the excised nodules on the forearm showed giant cells and an arrangement of epithelioid cells suggestive of tuberculosis, so that the laboratory report read: "Chronic inflammation, probably tuberculous."

In spite of these findings in the skin it was impossible to determine any focus of tuberculosis in the patient by either physical examination or x-ray studies, although the Pirquet test was strongly positive.

This case illustrates a type not infrequently met, in which the clinical picture is typically that of one of the tuberculides, in this case both erythema induratum and sarcoid, while no visceral lesions are demonstrable. It is, of course, entirely possible that the patient might have tuberculosis in some location, such as the retroperitoneal lymph glands, as in the cases related by Goeckerman, where it could not be demonstrated.

Case Four: A Jewish woman, aged thirty-five, stated that seven years before her entry into the hospital she had developed a number of nodules on the buttocks. These were hard and of a purplish color and were free of subjective symptoms except for a slight tenderness when she sat down. These nodules gradually disappeared spontaneously, leaving only a dimpling of the skin of the buttocks due to the tension on the overlying skin by the scar tissue formation beneath. About six months before she was seen she had developed a

number of firm, doughy, deep-seated nodules and plaques in the skin over the posterior and lateral aspects of the legs and many of these had broken down to form ulcers.

Upon examination the patient showed a number of purplish to reddish plaques over the dorsal and lateral parts of the legs, of firm consistency, and several of these had broken down, the resulting ulcers being fairly deep, irregular as to outline, and with granulation tissue or necrotic bases. In the upper half of the legs, also on the posterior surfaces, there were found about fifteen deep-seated, firm, rounded nodules, the skin over them being entirely unaffected, so that the lesions were discernible only by palpation. The skin of the buttocks showed the dimpling referred to above, but there was nothing else of note.

Physical examination disclosed no tuberculosis in this case, nor did the x-ray studies. The Pirquet test gave a strong positive reaction, with marked induration and some lymphangitis.

Biopsy specimens were taken and a pathological diagnosis of fibrocaceous tuberculosis was made. Three guinea pigs were inoculated with some of the tissue taken from the lesions at different times, but the results were negative in each case.

The history of this case is interesting, in that the patient apparently had had sarcoid of the Darier-Roussy type in the buttocks seven years ago, and then after a long period of freedom developed an extensive and typical erythema induratum.

Case Five: A Jewish girl was first seen in 1923, at which time she had seborrheic dermatitis of the face, which responded to treatment, but recurred from time to time. She was next seen in January, 1926, when she complained of swelling of the feet when they became cold, and a sensation of numbness of the lower extremities. This had been present for several weeks and during the same period she had noticed a number of purplish nodules. Upon examination it was found that she had a poor peripheral circulation with a distinct cutis marmorata. The tibial surfaces showed a number of purplish nodules of varying size, of doughy consistency and only slightly tender. The picture was essentially that of erythema nodosum, but was somewhat atypical in that the lesions were more chronic in appearance and much less tender than usual. The extensor surfaces of the elbows exhibited a number of small whitish scars which were suggestive of previous folliclis lesions. The patient was examined for evidence of tuberculosis and, while the physical examination was negative, the x-ray films showed distinct evidence of an old hilum tuberculosis.

The tibial manifestations described cleared up spontaneously in about two months' time. In February, 1928, however, there was a similar outbreak

and this persisted for five months, and during that time she also developed a number of folliclis lesions on the backs of the fingers. During this attack she was treated with neoarsphenamin and neosilver salvarsan, these drugs apparently accounting for the eventual disappearance of the lesions in July, 1928. She has had no recurrences since that time, but still complains of the symptoms dependent on the circulatory disturbance.

This case presents the suggestive combination of folliclis and a nodular eruption of the legs which presents some features of erythema nodosum and some of erythema induratum, being in the proper location for and having some of the tenderness of the former, but with the chronicity and purplish coloration of the latter.

Conclusion: The term tuberculide designates a group of conditions undoubtedly of tuberculous origin in many instances at least. It should be understood that in those cases where a tuberculous origin is admitted they may be due, according to the various theories, to a tuberculo-toxin, to dead bacilli or those of lessened virulence, or to a state of allergy on the part of the patient toward the tubercle bacillus.

It is urged that the tuberculides merit a broad interest and recognition by the medical profession in order that we may take advantage of their value in many instances as diagnostic signposts and aids.

DISCUSSION

JOHN H. GILPIN, M.D. (Fort Wayne): After listening to this thorough discussion of an important subject, it would certainly be useless to attempt to add anything. The only form of tuberculosis of the skin was originally thought to be scrofuloderma. Then lupus vulgaris was accepted. We simply had to add more names to the list of diseases and accept Dr. Senear's presentation as authoritative. We all know syphilis can be diagnosed without having seen the chancre. Bright's disease has its retinitis, syphilis its adenopathy and alopecia and we must conclude that tuberculosis of the skin is diagnosed as Dr. Senear stated.

FRANK W. CREGOR, M.D. (Indianapolis): We are all grateful to Dr. Senear for his visit to us and for presenting this splendid paper.

It is a recognized fact that tuberculosis may involve the skin. I think of tuberculosis much as I do of syphilis; that is, it is a disease which after finding a port of entry into the human body, disseminates itself and may become activated during the life of the individual from conditions which produce irritation or reduce resistance.

Dermatoses, which we are pleased to call tuberculides, have offered much ground for speculation in the past. I have never been quite able to reconcile myself to the view that tuberculides were the result of toxins liberated from a tuberculous focus in some distant portion of the body. I quite agree

with the view that these manifestations are probably allergic in character and are observed around the location of the causative organism. This reaction may be observed about a tuberculous skin lesion following an injection of tuberculin.

I recall a number of years ago, a patient with tuberculous peritonitis, the diagnosis being made on the operating table. A few months later, this patient developed a typical erythema nodosum.

I have recently seen a case of lupus erythematosus the symptoms of which cleared up after the usual treatment practiced at the present time. I am advised by the family physician that the patient is fatally ill with an intestinal tuberculosis.

PSYCHIATRIC PROBLEMS IN CHILDREN*

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INDIANAPOLIS

Psychiatric problems in children may be divided into three groups; the first includes those who may be called neurotic children, the second those children who present conditions of mental defect, and the third those who are actually insane. Neurotic children show a great variety of symptoms which call for the detailed study of the individual child and the home environment; their treatment usually requires the regulation of the home-hygiene. In order that this may be done, trained social workers are frequently essential; otherwise ignorance, indifference and the force of habit lead to the neglect of medical advice.

The second group, that of deficient children, raises questions which go beyond the mere individual problems of the neurotic child. The personal hygiene and that of the home must be supplanted by a school training adapted to the special needs; without suitable school opportunities no adequate solution of the problem of the deficient child is possible. While the neurotic child may be able to make use of the curriculum like his more stable comrade, the deficient child with his constitutional limitations is quite unable to do so. He suffers from the lack of suitable school environment and upon his constitutional limitations there may be grafted undesirable traits which a wiser education might have prevented. Education should aim at the best training for the adult task and the type of training suitable for those whose limitations will prevent them from ever being quite independent and from taking up the full responsibility of citizenship.

It cannot be emphasized too strongly that men-

*Presented before the Section on Medicine of the Indiana State Medical Association at the annual session held in Evansville, September, 1929.

tal defect forms the largest single form of delinquency. It is obviously in the best interests of the normal child, and the normal adult that this problem of the deficient child should be dealt with in a sound manner.

The community which would equip modern hospitals for the treatment of its typhoid patients, but neglect completely the sewerage disposal or its water supply, would show little judgment; but it is no more intelligent or economical to lay all the emphasis on the organization of reformatories, hospitals for the insane and jails and correctional institutions, while neglecting the school training of the deficient child.

The examination of the child should include the following fields of inquiry: physical examination, family history, personal history and developmental history, history of school progress; examination in school work, practical knowledge and general information; economic efficiency, social history and traits; moral reactions and mental examinations, including the Simon-Binet tests or its modifications.

The level of intelligence is not the only condition on which is determined the ability of an individual to support himself and to keep alive the ranks of those dependent upon society, but other factors are of great importance, such as the emotional responsiveness and stability of the individual and his general output of energy.

The future of these individuals is already foreshadowed by the other members of the same family. For example: a case referred to me by the Boys' School at Plainfield. The physical examination of this case showed this boy to have numerous stigmata of degeneracy as the high-arched palate, asymmetrical development of the face and head and very large, prominent, winged ears. He also gave a history of having attacks at night in which he twitches all over and which have the appearance of being nocturnal epilepsy. The family history reveals defectiveness on both the father and mother's side, the mother being an epileptic and the father a chronic drinker. This boy started to school at the age of six and at the age of ten was three years behind his necessary grade. He could not make friends easily and drifted with boys who were not of the better class. When a child he committed petty thefts. When a mere boy he stole chickens and on one occasion a revolver. He smoked cigarettes excessively and even when confined to the Boys' School, committed petty thefts of articles belonging to his comrades. The reason for committing him to the institution was the theft of an automobile.

Thus in the make-up of this boy it could be determined easily that there was a tendency toward delinquency. It is a fact that a persistent group of cases is found everywhere, in which the children are reported as quarrelsome, stubborn,

disobedient, resentful of authority, liars and thieves. Such traits, added to the mental deficiency, means that unless such a boy is most wisely understood and cared for, he will become delinquent at an early age. Permit me to emphasize that it is much easier to prevent delinquency than it is to cure it.

These defective children are likely to be misunderstood; they are apt to be judged by the standards suitable for the normal child and to be punished for faults and deficiencies which are almost inevitable results of their constitutional limitations.

The general adaptability of these defective children, their economic efficiency and their happiness, will depend largely upon how far their early training has been adapted to their constitutional limitations and the special requirements.

Adolescence is recognized generally as a critical period in the mental life of the individual, not only is it a period during which disorders are very apt to develop, but it is the time when the mental balance of probably every boy is disturbed to a greater or less degree. This is shown in a variety of ways, as, for example, by a tendency to become irritable and discontented or to indulge in day dreams and romantic fancies. The change in behavior and disposition which young people display at this time makes them difficult to deal with and causes a great deal of trouble and worry to those who are responsible for their care and up-bringing.

Aside from the neurotic and mentally defective children, as I have stated previously, we have those who during infancy and early childhood develop normally, but who later in childhood, at puberty or during early adolescence, show distinct forms of mental disease. Many such children could be guided to healthy maturity if they were studied carefully and their parents advised as to their upbringing. Many educators are so busy advising methods of scholastic education for the average boy that they do not give time to the consideration of children who do not meet these fixed standards of the normal child.

The influence of physical diseases in childhood plays a great part in the future mental health of the child.

Mental disorders in children take on many types whether it be merely temporary or of the more severe type that at the time or later results in permanent damage. The question might be asked, "What constitutes normality in a child?" This cannot be definitely answered because the limits of normality are wide and we all recognize when this boundary is passed. Conduct is our only guide to any evidence of mental action being abnormal.

We are all familiar with such mental disturbances in children as are brought by a disfunction

of the thyroid, as for example cretinism. Also the more acute cases of hypothyroidism in children who start out well, learn readily and are ambitious and may even excel in their studies who suddenly have changed into fat, lazy children who have lost all interest in school and do nothing but sit about listless and indifferent. Such a case may have no other physical signs of hypothyroidism than obesity. A large thymus after the age at which atrophy should occur is often associated with a boyish mental attitude and the corresponding characteristic boyish facies observed in such cases. Fever is one of the protoplasmic tests that every child is put to. Some children become delirious with even a slight temperature. The significance of this dissimilarity in reaction by delirium to mild fever means that the child is of such unstable, nervous make-up that slight stress disturbs its equilibrium.

The fears of children should not be permitted to grow and if permitted to do so may be the basis of mental disturbance later. A fearful child properly guided can be made to lose its fear. Bad temper in children is of the greatest importance. Some children go through babyhood and into childhood smiling all the time, while others are continually fretful, crying, whining and giving away to frequent attacks of impotent rage, although they are not physically ill and are well nourished.

Ill-tempered babies sometimes manifest mental disorder, in the form of acute mania. Such children physically well have outbursts of causeless, impotent rage, followed by the mental confusion, as far as an infant can manifest it.

Such organic lesions of the brain as produce spastic hemiplegia, aside from the picture of feeble-mindedness, occasion distinct mental phenomena. Occasionally typhoid fever in childhood lays the foundation for a psychosis which may not become apparent until years later. These cases during convalescence at times begin to show changes in the personality. From being happy, good-tempered children, they become irritable and morose, with frequent attacks of anger.

Young children, when insane, show predominately emotional symptoms because the reasoning faculty is the last to appear, and at a time when feeling is well developed, intellect is just beginning to make its appearance. Ability to reason, except in a very fragmentary way, exists only in man and is only potentially present in him at birth. Mania, therefore, is the insanity of early childhood. Delusions may occur somewhat later but hallucinations often make their appearance early. These generally appear after the child is old enough to dream. We have had at our institution several distinct and classical cases of dementia præcox with hallucinations and delusions as young as eleven years of age. I recall seeing

a child nine years of age at the psychiatric clinic in Berlin with fully systematized delusions of persecution of the paranoid type which followed grandiose delusions of the most expansive nature.

Juvenile paresis is the organic insanity of childhood. Its only cause is congenital syphilis, *i. e.*, though something else may be an exciting cause, syphilitic infection must exist. It differs in no way from paresis in the adult, except that children as a rule cannot present the wealth of delusions that older people exhibit. We have had such cases at the Central Hospital and the youngest case was twelve years of age. One case at our institution had the history of both parents being luetic, with four other children in the family, all luetic. We have the record of a case of juvenile paresis, thirteen years of age, who was given the malaria therapy, who has been returned home for three years and doing fairly well. The progress of the disease apparently has been checked as she now has a negative serology.

Encephalitis lethargica has in recent years left a trail of broken minds and crippled bodies in children. We have several cases at the present time with marked mental manifestations where the disease occurred during the childhood period of the individual, and has remained dormant for many years. In many of these cases syndromes with tics and other somatic phenomena are noted. In this disease in children the moral sense is more affected than the intellectual ability. Children who were previously upstanding and had a good, straightforward attitude toward life became vicious, sneaky, cowardly and criminal.

Sydenham's chorea generally presents slight, emotional and intellectual disorder, but rarely serious symptoms. Usually there are only emotional irritability, fretfulness, peevishness and inability to fix attention on intellectual work. Very rarely does an acute violent delirium occur. The disease is of interest because it illustrates the fact that certain types of personality are most prone to suffer from certain diseases. It has long been known clinically that a type of personality immune to one disease is very susceptible to another. The most prone to Sydenham's chorea is on the physical side, also prone to rheumatism. Mentally the victims are in some respect hyperthyroid. They are frequently spare, small boned, bright eyed intellectually, quick and emotionally fluctuating. Obese, mentally sluggish, physically inactive children rarely suffer from this disease.

Hysteria in its true form may occur in children. In such cases the environment has not been suitable in a particular way, causing undue stress in certain lines. In such cases there is usually an inherent predisposition. The majority of the people who late in adolescence or early maturity become victims of lack of emotional balance, are

children who have morbid fears, who become delirious under slight fever, have tics, bite the nails, stammer, are unduly emotional and whose imagination tends to develop along the morbid lines, who suffer greatly from reflex disorders, *e. g.*, headaches from eye-strain and allied complaints which are showing the first danger signals of what later will be a full-fledged hysteria.

Hysteria itself, *e. g.*, blindness, mutism, palsies, appearing in small children, is evidence that the break-down has already occurred.

In neurasthenia of children there is usually a long prodromal stage. The child who tires easily, especially after small mental effort, who has headaches and back-aches without cause, who quickly becomes fatigued at play, is showing the first signs of a future life of neurasthenia. Indeed, neurasthenia first appearing during adult life without the early history is always not neurasthenia, but the beginning of some organic disease, frequently cardio-vascular-renal in origin, sometimes paresis.

In the study of the delinquent child the home must be taken into consideration. To understand the child the influence of the home must be studied. The physician whose training has made him competent to deal with the delinquent child has also in his work to meet the alcoholic father, the insane mother, the wayward sister, adolescent conflicts and marked incompatibilities as influences on behavior with unfavorable environment. The physician now finds that he has not only a child to treat and train but a home to deal with, a whole complicated situation to handle.

What is done during the first ten years is infinitely more important than anything that can be accomplished later. We should strive, through the careful study of the individual and through adaptation of educational methods to special needs, for prevention, correction and increasingly satisfactory guidance of development.

Children should be given opportunity for normal reaction to their instincts and impulses; to be active in play and work; to sleep at need, to express their emotions and not only to have knowledge of themselves but to observe others and cooperate with them. Function, response to stimulation and active work, represent the first conditions of mental as well as physical health.

The child who has normal habits of reaction to his impulses and feelings, who has many interests and the power of self control furnished by them, the ability to concentrate attention on the present, habits of orderly association, the active attitude in the face of difficulty and a steadfast purpose for service and a sense of independence is not only sane, but prepared for happiness, efficiency and mental health.

DISCUSSION

J. M. PULLIAM, M.D. (Fort Wayne): Thirty years ago when I started practicing medicine tuberculosis was a big problem. Nobody fears tuberculosis now. I think the psychiatric problem is the biggest problem today. Because Dr. Bahr is head of the main institution in the state he knows quite a bit about this problem. Every patient admitted to the state institution lives an average life of ten years and costs \$3,150. Dr. Bahr hasn't the money to do the work right and he needs more money. He needs the money to care for patients who are actually mentally sick. I want to talk mental diseases and to impress on the minds of the medical men in the state to get busy on mental diseases. We are seeing more mental cases every day. If we start with children we will have less mental diseases in adults. If Dr. Bahr has money enough and proper number of physicians and nurses mentally trained, we are going to get better results. I am in favor of the appropriations in the state being increased so that Dr. Bahr can have more physicians. No man can take care of 250 patients. A man taking care of fifty cases of mental disease in a day has a bigger job than any man doing general practice. Some are so far gone when we get them that nothing can be done and I believe we must awaken the public to mental cases as well as tuberculosis. There is one thing I see in connection with mental disease, everybody thinks it is a disgrace for your brain to get sick and I cannot see the fallacy of it at all. Your brain is just as apt to get sick as any other part of your body. Nobody is sure whether he is going to have a sick brain today or tomorrow.

Dr. Bahr knows that his institution is overcrowded as the institution in your section is overcrowded. As the law now is, we have to go through the courts to get a sick patient into a mental hospital. I think the superintendent should be able to admit a patient to a hospital on the application of the doctor or say three doctors and let the court proceedings come last. We have a new law, slower than the old one, and it has been blamed on the court. It takes too long to get mental patients where somebody can take care of them. We should have places where we could make application for admission of the patient to the hospital just as you do for appendicitis. They can admit that patient at once if they have a room and let the court proceedings be the last thing. The superintendents will do the right thing and I know they will. I have been assistant superintendent for twelve years and know from previous experience. I am highly in favor of the state institution getting the work and getting it early. Private institutions are expensive and cost too much for the average person. I looked over my statistics and the average cost was \$450. I have

had one as high as \$2,700. I am in favor of getting mental cases in state institutions early. I am in that work but I am depending on the private institution for my living. I cannot make any money because I spend too much money on the patient. I am not afraid of the state institution getting them away from me. I get a lot more kick in getting patients well than getting the money.

There is nothing I can add to Dr. Bahr's paper. He has given a very clear situation on things today and it is up to the general practitioners to wake up and help the men doing mental work.

L. P. HARSHMAN, M.D. (Fort Wayne): I shall confine my discussion to a limited but untouched field of mental disorder. I refer to the defective delinquent who cannot be called feeble-minded, and who is not definitely insane. Yet he is the type which we all know is in some way not normal. This type of person so often is in need of institutional care. If we send him to the feeble-minded school he is too high grade to get along and is a terrible trouble maker. If he is committed to a correctional institution he becomes the dupe of higher grade mentalities and the stay at this place does him no special good. Indiana as well as many other states could take a good lesson from New York and Massachusetts and establish an institution for the care of these individuals and could do reconstruction of what now is salvage in our present method of handling.

Dr. Bahr has pointed out, but not emphasized as strongly as I would urge, that many of the public schools have not met the situation of adapting their courses to meet the needs of many grades of intelligence which are found in their population. Most of the larger school systems have established opportunity rooms for their dull normals and feeble-minded, but in the smaller communities this problem is not met. I know of no better way to foster delinquency than by the attempt to make the subnormal child attempt to keep pace or even make him take courses along with the normals even though he is passed on after two years in any one grade whether he made a passing grade or not. To me this procedure amounts to nothing short of an indictment. The law provides that a feeble-minded child can be excluded from the public schools, and the law also provides that they can be committed to the Indiana School for Feeble Minded Youth and admitted as there is room. Fully 20,000 children can come under this category; the same statutes provide for the care of 2,000. The inconsistency is ludicrous; more than that, it is tragic. However, it is not impossible to solve the problem. Fifty percent of the problem is preventable by sterilization of the unfit.

MAXILLARY SINUSITIS: A STUDY OF 100 CASES*

D. O. KEARBY, M.D.

INDIANAPOLIS

This paper originally was written for our local county medical society. I probably should offer an apology for presenting it before eye, ear, nose and throat specialists. I have added a bit about treatment, so the paper now is about as I view suppurative maxillary sinusitis and my methods of procedure to cope with the condition.

There is no question in my mind that our handling of sinusitis is not correct, and that idea is brought to me more forcibly by the patients who come into my office, than through what my contemporaries say. In my own experience most of the patients say, before I can outline any method of procedure, that they do not want any operation for the reason that their friends have been operated upon and they are no better than they were before. They are convinced that our treatment is a failure, and I think that is a good criterion and we must not be doing them any good because they would be singing our praises if we were really helping them. I would like to say that the cases considered were not picked to represent something. I had my office girl run back through our records and select the first fifty consecutive acute maxillary sinus cases, and select fifty that were recorded as chronic maxillary cases.

On account of the relation of the maxillary antrum to the nasal cavity, frontal and ethmoid sinuses, and to the teeth, it is more easily and more often diseased than any of the other nasal accessory sinuses. Its dependent position in the skull and poor drainage facilities make it the least likely to get well spontaneously. Its ostium is so placed in the middle fossæ of the nose as to be blocked easily by any changes in the nasal mucosa, whether acute inflammatory or chronic hyperplastic. Direct extension of acute infection from the nasal mucosa and other sinuses is always probable, and in influenza practically always occurs. The floor of the sinus is in direct relationship to the teeth. Any apical infection or abscess formation from devitalized teeth easily can set up an inflammation of the lining membrane of the antrum. While playing a minor part as an etiological factor, onset of antrum disease from the teeth must ever be in mind.

Like all cavities with a lining membrane the antrum is subject to all the inflammatory changes that could be found elsewhere—acute inflammatory, acute suppurative, chronic suppurative, chronic hyperplastic, polypoid degeneration, cysts, abscesses, bony necrosis, tumors, etc. It is not

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free from trouble in the exanthemata and contagious outbreaks. Trauma and foreign bodies are not infrequent etiological causes of disease. Syphilis and tuberculosis are not likely ever primary in the antrum. Recurrent erysipelas may have back of it a chronic suppurative antrum.

On account of the frequency of antrum disease, and because it is so often unrecognized, two years ago I made a comparative study of one hundred cases in my private practice—fifty acute and fifty chronic—to analyze the subjective and objective signs that would lead a physician to suspect and investigate the antra. I was finding that a very simple array of symptoms made me suspicious of antral disease. Definite pathology nearly always rewarded my suspicions and search. For the busy physician who is expending his energy and time in general practice, this syndrome of symptoms should be brought to his attention. The bacteriology was not studied in any particular sense. Specimens from all chronic cases were submitted to the laboratory. Practically all were staphylococcus. The finer points of diagnosis that require hospital, or well-equipped office laboratories for cytologic study are not in this study. Pathology can be read in any of the books.

Comparison of symptomatology in acute and chronic maxillary sinusitis in fifty cases each:

| <i>Subjective Symptomatology</i> | <i>Acute</i> | <i>Chronic</i> |
|--------------------------------------|--------------|----------------|
| 1. History of frequent colds..... | 8 | 11 |
| 2. Impaired breathing | 50 | 31 |
| 3. Followed a cold | 44 | 0 |
| 4. Nasal discharge | 42 | 28 |
| 5. Pain over the cheek | 27 | 5 |
| 6. Pain about the teeth | 4 | 0 |
| 7. Pain over frontal region | 28 | 26 |
| 8. Occipital pain | 5 | 5 |
| 9. Cough and expectoration | 8 | 11 |
| 10. Rheumatism, arthritis, etc. | 11 | 3 |
| 11. Asthma | 1 | 2 |
| 12. Earache | 2 | 4 |
| 13. Impaired hearing | 0 | 6 |
| 14. Eye symptoms | 7 | 4 |
| 15. Odor | 0 | 6 |
| 16. Loss of sense of smell..... | no record | 10 |

Comparison of Objective Findings

| | | |
|--|----|----|
| 1. Nasal discharge | 42 | 50 |
| 2. Nasal blocking, deviations, hypertrophy | 11 | 43 |
| 3. Naso and oro-pharynx changes | 50 | 50 |
| 4. Transillumination helpful | 50 | 50 |
| 5. Antral lavage—pus | 49 | 50 |
| 6. Nasal polyp | 0 | 5 |
| 7. Atrophic rhinitis | 0 | 3 |

Complications

| | | |
|------------------------------|---|----------|
| 1. Ethmoid involvement | 4 | frequent |
| 2. Frontal involvement | 5 | 4 |
| 3. Mastoid involvement | 3 | 0 |

| | | |
|--|---|---|
| 4. Meningitis | 1 | 0 |
| 5. Eye pathology, iritis, iridocyclitis, optic neuritis, atrophy | 2 | 5 |

Conclusions in This Study: That suppurative sinusitis, both acute and chronic, are much more prevalent than generally recognized. To avoid chronicity, the infection must be recognized and appropriately treated in the acute stage. The record in this study shows that only six (6) of the fifty cases had ever had similar trouble, and a three-year check of cases treated in my office for acute suppurative maxillary sinusitis, none of them have developed the chronic type nor have any of them had the second attack. And since but six give a history of similar trouble, it is fairly certain that they have not been treated elsewhere or gotten well spontaneously. Further, that the disease is not without danger.

The subjective symptoms are so common to all that my nurse in writing histories in practically every case will make a diagnosis of acute sinusitis from patient's story of his trouble. Simplified into the most common and predominant subjective symptoms of acute suppurative sinusitis we would classify as follows:

| | |
|---|----|
| 1. History of a cold | 44 |
| 2. Stuffy nose and discharge | 50 |
| 3. Pain in cheek, teeth, frontal or all | 59 |

This simple array of symptoms warrants a nose, throat and sinus examination.

What are the predominating objective findings at examination?

| | |
|---------------------------------------|----|
| 1. Nasal discharge | 42 |
| 2. Naso and oro-pharynx changes | 50 |
| 3. Transillumination helpful | 50 |

These three warrant antral lavage. Forty-nine of our cases had pus in the antra.

Subjective symptoms in chronic suppurative maxillary sinusitis:

| | |
|---------------------------------|----|
| 1. Impaired breathing | 31 |
| 2. Nasal discharge | 28 |
| 3. Pain over cheek | 5 |
| 4. Pain over frontal | 26 |
| 5. Frequent colds | 11 |
| 6. Cough | 11 |
| 7. Loss of sense of smell | 10 |

Such an array of symptomatology, or partial array, warrants a careful study of accessory sinuses.

Objective findings:

| | |
|--|----|
| 1. Nasal discharge and post nasal dropping | 50 |
| 2. Nasal blocking | 43 |
| 3. Pharynx changes | 50 |
| 4. Transillumination helpful | 50 |
| 5. Check with x-ray when in doubt. | |

In the acute form, notice relation of history of cold and few that had similar trouble. Forty-four

cases followed a cold or head infection. Only six out of fifty had had similar trouble. This makes one feel that acute suppurative maxillary sinusitis is probably specific in character. Notice but eleven had structural changes in the nose, causing nasal blocking. In the chronic form, notice relation of infection to architectural changes in the nose. Forty-three cases of suppurative maxillary sinusitis have structural changes causing nasal blocking. No record was kept, unfortunately, of how many of these chronic cases had had their tonsils removed without any improvement. I am convinced that too many tonsils are removed when the real trouble is overlooked in bad teeth and infected sinuses.

Diagnosis and Treatment: The cases that present themselves to the specialist are usually from one of five sources—

1. The internist in his routine examination desires the sinuses checked for foci of infection. These are, usually, patients who are below par, contemplating some large major surgical procedure, like thyroidectomy, cholecystectomy, or suspicious chest pathology, either of the heart or lungs.

2. The pediatrician who finds a child not doing well without any well-defined reason. He seeks help in locating hidden infection.

3. The general practitioner who is alert to the frequency of the disease, and recognizes the symptoms, or, in his cases, who do not fully recover, without explainable reasons, desires a study of ear, nose and throat for foci of infection.

4. The obstetrician, in his post-natal care of the mother finds signs of focal infection.

5. A larger number come, because a friend or neighbor with similar subjective symptoms has been benefitted.

Diagnosis: Acute or sub-acute type; date of onset; history of a cold or influenza; stuffy nose; nasal discharge; pain about the teeth, over the cheek or frontal region; probably cough and expectoration, suggest sinusitis.

Objective Findings: Nasal discharge, nasal blocking or not, naso and oro-pharynx changes from normal. These signs suggest transillumination, which is more often helpful than not. Whether it is or is not, antral lavage is performed. This procedure is done in nearly every case in the middle fossæ. If no accessory ostium is located, the trocar is pushed easily through the naso-antral wall, which is a thin membrane in this region. The antrum is lavaged with warm, normal salt solution. The x-ray is used rarely in the study of acute or sub-acute cases.

Diagnosis of Chronic Cases: History of frequent colds, impaired breathing, nasal discharge, headaches, frontal and occipital, chronic cough and expectoration, loss of sense of smell, digestive

disturbances, all are suggestive of accessory sinusitis and lead to an examination for such pathology. The objective findings usually show nasal discharge, nose blocked by hypertrophies, deviations, ridges and spurs, perhaps polyp formation, pharyngeal changes which have been named lymphoid cobblestones. Transillumination follows the objective examination. It is usually helpful to one who uses it daily and follows his cases throughout their recovery. Antral lavage is next. The same procedure, as in acute cases, is resorted to. Occasionally, in either type of case, difficulty to get through in the middle fossæ is encountered. We then use a No. 18 spinal puncture needle, and go through the inferior fossæ beneath the inferior turbinate. Normal salt is used for lavage. The washings are scrutinized carefully for signs of infective material. If any is found, our suspected diagnosis is confirmed. If the washing is negative, we think of it as a negative Wassermann—it means nothing, for, in many cases, the exudate will be solvent in the irrigating solution, and in the hypertrophic type, or cystic type with encapsulated pus, the irrigation returns clear. So, in all chronic cases, we make use of the x-ray. Primary films are made and studied. They are very helpful. In the known case, they corroborate the clinical findings. In the unknown, they show signs of pathology or else deny it. If pathology, with or without pus, is determined, we desire next to know something of its extent, especially regarding the damage in the lining membrane. We make use of the lipiodol instillations freely, for two reasons—to outline the extent of thickened membrane and the rapidity of drainage. Both extent and drainage are very necessary in determining method of procedure, to effect a cure. No x-ray films are ever made immediately after lavage or any extensive nose examination.

Treatment: I usually think of my cases as acute, sub-acute and chronic.

Acute maxillary sinusitis will respond quickly to simple lavages, with appropriate rest in bed, ephedrine and non-irritating antiseptic solutions instilled into the nose sufficiently frequent to keep the airways open. Laxatives and salicylates as needed.

Sub-acute type is one in which more time has elapsed since the onset. This usually will respond to the same routine treatment as the acute. In those cases that do not show any tendency to heal, one must resort to window resection. This should be done through the naso-antral wall, beneath the inferior turbinate. A large opening should be made. Occasional irrigation should be continued. Better drainage and aeration having been afforded, the sinus will cease discharging quickly.

Chronic sinusitis must be thought of in terms of what has happened to the lining membrane. If

the study has determined it to be a chronic suppurative sinus, due to improper drainage and aeration, window resection, as described, with appropriate treatment to hypertrophies, deviated septum, spurs and ridges, usually will suffice. When the study shows not only insufficient drainage but degenerative changes in the lining membrane, such as polyp formation, cysts, hypertrophic changes, etc., not anything less than completely evacuating the antrum of all of its contents will do any good. The type of operation performed would be that which, in the operator's experience, gave him the best results. I usually prefer the Caldwell-Luc.

I wish to emphasize that the x-ray film is not taken immediately after lavage of the antrum or any external examination of the nose, because you will not get a true picture. In subacute types that do not respond to ordinary treatment I use the window opening, and in a course of a week the discharge should cease. I always check with x-ray when in doubt. I use x-ray all the time for the reason given a while ago in chronic types. It depends on what has happened to the lining membrane as to just what my method of procedure will be.

Case 1—Wagoner. Age 11, school boy. Complaint: Headache, pain in right side of face, bulging of right eye. Swelling on right side of face. History: Had influenza two weeks previously. Made apparent fair recovery. During sickness had a severe frontal headache which gradually subsided. Two days later headache returned and continued for two days. Swelling of right side of face began and right eye became prominent. Nose blocked. Pus in right nares, eyeball became proptosed, fixed and immovable. Temperature 99.8, pulse 100, respiration 120. Examination showed same as recited in history. X-ray: right frontal, right antrum and right ethmoid very dense, sphenoid, dense. Left side negative. Operation: maxillary window, ethmoidectomy. Pus in maxillary and excessive amount of pus flowed from the exenterated ethmoid and frontal. Conclusion: Complete recovery.

Case 2—Dalmbert. Iritis. Seldom has a cold. No nasal discharge. Some postnasal dropping. Nose open all the time. No headache. Examination: Blocked nose, deviated septum, nasopharynx changes. X-ray: Poor aeration all sinuses. Posterior ethmoids and sphenoids show marked changes, left more than right. Lipiodol shows no change in lining membrane, normal except poor drainage.

Case 3—Jordan, M. Age 32, accountant, married. Always healthy except headache. Complaint: Severe headache in right frontal region for years. Wears glasses when working. No relief from same. Had submucous with relief of headache except occasional flare-up. History: In Novem-

ber, 1927, this patient was seen by family physician and ordered into St. Vincent's Hospital with a suspected T.B. infection. Pain in chest, temperature, and cough. Chest pathology was ruled out for T.B. by physical and x-ray study. The following blood pictures could not be explained except that focal infection must be present. Patient referred for study. Under absolute rest in bed the following blood picture was found:

| | 1927—November: 10 | 11 | 12 | 13 | 14 |
|--------------------|-------------------|--------|--------|--------|-------|
| White count | 14,500 | 19,600 | 18,460 | 20,350 | 9,200 |
| Polymorphonuclears | 30% | 40% | 27% | 54% | 60% |
| Large mononuclears | 11% | 10% | 13% | 9% | 5% |
| Small mononuclears | 11% | 15% | 9% | 13.5% | 15% |
| Eosinophiles | 47% | 45% | 46% | 18% | 20% |

The x-ray picture showed pathology in antrum. Radical maxillary operation on left side disclosed a large flat polyp filled with pus. Antrum contents removed—culture of staphylococcus. Right maxillary was opened but no surgery of contents.

Postoperative blood picture:

| | 11-18-27 | 11-21-27 | 1-6-28 | 2-8-28 |
|--------------------|----------|----------|--------|--------|
| White | 14,000 | 15,750 | 13,400 | 8,000 |
| Polymorphonuclears | 27% | 54.5% | 70% | 71% |
| Large mononuclears | 14% | 11% | 2% | 2% |
| Small mononuclears | 11% | 13.6% | 20% | 12% |
| Eosinophiles | 45% | 19% | 8% | 2% |

Result: Eosinophiles returned to practically normal. Patient is in good health.

Case 4—Smith, F. Married, normally healthy. History: Hunter's ulcer of bladder. Under treatment by Dr. H. O. Mertz. Referred for study for focal infection. Examination: Chronic infected tonsils. Deviated septum, shadowed left maxillary on transillumination. X-ray, primary findings secondary by x-ray. Operation: Tonsillectomy—no improvement in three months. Second operation—submucous resection; radical left maxillary; window resection into right maxillary. Left maxillary had large sized polyp on the lateral wall and floor filled with serous fluid. Upon puncturing polyp mass, the mucous membrane flattened out. The mucous membrane of the entire antrum was thick. All was removed and sent to the laboratory for examination and culture. Staphylococcus organism recovered. Vaccine made and given. Results: Bladder ulceration much improved.

Case 5—Shuler, M. Age thirty-seven, salesman, married. Always healthy. Complaint: Tired feeling; listlessness and dizziness. No appetite—loss of weight. History: Felt bad four or five months. Started with stomach trouble. Had slight temperature—does not know cause nor duration. Loss of weight. Pretty nervous. Healthy always until present trouble. Albuminuria. Referred for focal infection. Examination: Nose straight but congested. Maxillaries and frontals transilluminate rather cloudy. Hypertrophied infected tonsils. X-ray: Chronic changes in all the sinuses with hyperplastic changes in the sphenoids, especially on the right. Diagnosis: Chronic sinusitis.

Chronic tonsillitis. Operation: Submucous and bilateral windows into maxillaries. Window resections of both sphenoids. Opened floor of both ethmoids. Results: Patient practically recovered. Albumin disappeared. Tonsillectomy advised later.

MEDICAL FRAUDS*

ARTHUR J. CRAMP, M.D.,
CHICAGO

The Bureau of Investigation of the American Medical Association is a later name for what used to be called the Propaganda Department. Originally, the function of the Bureau of Investigation was limited almost exclusively to a discussion of the proprietary medicine evil as it affected the medical profession and, through it, the public. The articles then published dealt with medicinal products that were, ostensibly at least, sold for physicians' prescription purposes. As the more flagrant evils of the proprietary problem were mitigated by the exposures that appeared and the awakening of the profession to the evil, the Bureau of Investigation gradually broadened its scope by turning the light of publicity on the "patent medicine" evil and quackery. This extension of its activities was brought about by the repeated and insistent requests for information coming first from physicians and later from the public, also. Twenty years ago it was a rare thing for THE JOURNAL to receive an inquiry from a layman; last year the Bureau answered about 10,000 letters, more than half of which were from laymen.

In addition to receiving letters from individual laymen asking for information about specific nostrums or quacks, and from college and high school students seeking data for use in their classes, there is another phase of the Bureau's work that one hears little about, but which is having a far-reaching influence. For years those interested in truthful advertising have kept in close touch with the Bureau of Investigation and have sought from it information that could be obtained from no other source. The National Better Business Bureau and affiliated local Better Business Bureaus, easily the most potent influence for the elimination of fraud in advertising, have been in close cooperation with the Bureau of Investigation since its inception. Then there are many advertising managers of newspapers and magazines who seek information from the Bureau of Investigation in an attempt to keep the advertising pages of their publications as free as possible from objectionable medical "copy." Requests for information from such sources come in daily.

*A brief talk given before the annual session of the Indiana State Medical Association at Evansville, September 26, 1929, by Arthur J. Cramp, Director, Bureau of Investigation of the American Medical Association.

Another class from which the Bureau receives many inquiries is laymen who have written municipal, state or federal officials for information that they assumed these officials could furnish. Then there are letters that come directly to the Bureau of Investigation from municipal, state and federal officials themselves seeking information on products or individuals coming within the scope of the department's activities. Conversely, the Bureau plays an important part in bringing to the attention of state and federal officials schemes and methods that seem to be a menace to the public health, a violation of the law, or both.

The material dealing with "patent medicines" and with the cruder forms of quackery is reprinted in the book, "Nostrums and Quackery." Two volumes of this book have been issued. In addition to these two books, the Bureau of Investigation also issues a large number of pamphlets dealing with the "patent medicine" evil and quackery. A number of educational posters, dealing with various phases of the nostrum evil and quackery, have also been prepared. Supplementing the posters, there is a number of stereopticon slides, so arranged that they can be used either in an automatic projection apparatus, letting the slides themselves tell the entire story ("legend slides" being interpolated between "illustrative slides") or, without the use of the "legend slides," for lecture purposes. These slides are available either for rental or purchase at or below cost.

In brief, the Bureau of Investigation is a clearing house for information on the nostrum evil, quackery and allied subjects. It is doing a work that is done by practically no other agency, a work that theoretically belongs to the state, using the word "state" in its broadest sense. Unfortunately, the exigencies of national politics make it impossible for federal agencies to tell unpleasant truths when these involve huge vested interests. Nevertheless, if the public's health is to be served, these truths must be told. The medical profession of America, recognizing this fact, has assumed this responsibility and is discharging it through the Bureau of Investigation.

SPECIAL ARTICLE

INDIANA UNIVERSITY SCHOOL OF MEDICINE AND HOSPITALS

(Seminar November 22, 1929)

HODGKIN'S DISEASE

EDWARD G. BILLINGS, M.D.

MEDICAL DEPARTMENT

ROBERT W. LONG HOSPITAL

I am presenting two cases of Hodgkin's disease, both male adults in practically the same decade of life, who had about an equal amount of lymph-

adenopathy on admission. I am showing them to illustrate the comparative results of two types of therapy instituted over a short period of time. The two types of therapy mentioned are (1) deep x-ray radiation, and (2) the injection, intramuscularly, of an autogenous extract of the involved lymph glands, as suggested recently by Dr. A. W. Wallhauser.

The first case is that of Mr. S., age thirty-nine years, who first came to the Robert W. Long Hospital on September 5, 1929, complaining of an enlargement of the cervical lymph glands, dyspnoea (due to mechanical obstruction), loss of weight, and temperature. On physical examination the essential findings were: a temperature ranging from 99 to 101 degrees; some evidence of loss of weight, and a marked enlargement of all the glands of the neck. There were no evidences of mediastinal or axillary lymphadenopathy. Laboratory findings were negative except for a white blood count of from 11,000 to 12,000; and a 2+ T.B. complement fixation of the blood. At biopsy a large mass of lymphoid tissue was removed from the right side of the neck. This was diagnosed Hodgkin's disease.

Mr. S. was given x-ray radiations to both sides of the neck. Following this series of exposures the dyspnoea was relieved to such an extent that he was able to leave the hospital. He was again admitted four weeks later for further treatment. At this time there was a six cm. decrease in the circumference of the neck; no dyspnoea; considerable axillary and tracheobronchial lymph node enlargement.

The second case is that of Mr. E., age twenty-seven years, who entered the hospital on November 8, 1929, with bilateral cervical lymphadenopathy, temperature ranging from 99 to 101 degrees; no evidence of axillary or mediastinal pathology, but considerable evidence of loss of weight. Physical examination and laboratory findings were nearly identical with those in the case of Mr. S. A biopsy was performed and several large cervical glands removed. The tissue diagnosis was that of Hodgkin's disease. A sterile extract following Dr. Wallhauser's technique was made by grinding the glands removed in normal saline and passing the resultant emulsion through a Seitz filter. The filtrate was used as the therapeutic agent.

As treatment, the extract was given every other day, intramuscularly, in increasing doses ranging from one-fourth minim to 3 minims. Following each injection the patient experienced a chill, followed by a temperature of 103 to 104 degrees, and lasting from three to six hours. At the end of eighteen days the size of the neck had decreased 6.5 cm. The patient has been observed for approximately two and a half weeks since the last injection, and to date there has been a slow, but

gradual, decrease in the circumference of the neck, with no demonstrable involvement of any lymphoid tissue elsewhere in the body.

In conclusion, these cases have not been treated nor observed over a sufficiently long period of time to make any deductions as to the final outcome. However, I do believe that after a five- to eight-week period the subjective symptoms and the objective findings, being approximately equal when treatment was started, have been benefited as much by the autogenous lymph gland extract as by exposure of the involved tissue to the x-ray.

PAPILLOCARCINOMA OF BLADDER

JOSEPH H. CLEVINGER, M.D.

SURGICAL DEPARTMENT

ROBERT W. LONG HOSPITAL

The Robert W. Long Surgery Department presents a case of a white male, age thirty-five, with a papilocarcinoma of the bladder. This man had been treated medically eight years ago for blood in the urine. No examination of the bladder was done at that time. He had had periodic attacks of hæmaturia for five years following the first treatment. At the end of five years he was cystoscoped and a papilloma of the bladder was found. This was fulgurated, and after leaving another hospital he was able to do hard manual labor for a period of two or three years. At the end of that time he began to have severe attacks of hæmaturia, frequency, burning, dysuria, and difficulty in urinating; he also occasionally passed small pieces of tissue from the bladder. He was treated by his home physician for a short period of time and then referred to the Long hospital.

On first examination in the Long hospital it was impossible to see inside the bladder on account of the profuse hemorrhage. The man was very anemic, had lost markedly in weight, and his general physical condition was rather poor. A suprapubic cystotomy removal of the tumor, if possible, was decided upon after two cystograms had been made, one using sodium iodide and the other air. Lantern slides show the size of the tumor in the bladder after injection of the air and dye. From these slides it will be seen that the tumor occupied approximately four-fifths of the bladder.

The patient was operated under a combination of local and nitrous oxid anesthesia, the bladder being opened with an electro-thermic needle in order to prevent transplantation of the tumor. Upon opening the bladder it was found that a large cauliflower-like tumor filled almost the entire cavity. It seemed to be attached chiefly in the left lower part of the bladder near the vesical orifice. From this region about three ounces of very foul-smelling pus was obtained which we thought to be due either to a diverticulum or to

a superimposed abscess. It was found impossible to remove the tumor *en masse*, so it was coagulated and removed piecemeal. The base of the bladder was coagulated with a large electrode to prevent the infiltration of the bladder wall with malignant tissue.

At this time, three weeks postoperative, the patient's urine is practically clear.

This case is presented as showing the result of neglect. If the patient had returned to the hospital following the fulguration of the primary papilloma, perhaps the malignant papilloma would not have occurred. The case is interesting in that it shows a very large cauliflower-like tumor of the bladder which is typical of a primary papilloma which has undergone so-called malignant degeneration.

As to the prognosis, we are not able to arrive at any definite conclusions, but would be very guarded in giving a favorable outlook. The patient is to be cystoscoped and the tumor re-examined when his physical condition will permit.

TROPHIC OSTEOARTHROPATHY

GEORGE J. GARCEAU, M.D.

ORTHOPEDIC DEPARTMENT

JAMES WHITCOMB RILEY HOSPITAL

White girl, twelve years old, normal weight, developed normally until she began to walk, when the mother noticed that the toes of the right foot became sore. Dressings were applied, but the right foot gradually got worse and parts of the toes fell off in the dressings. The left foot became involved and the toes also dropped off at various times. Large ulcers developed under the ball of both feet, the left foot always being much worse. There has never been pain associated with this condition.

The child walked into the admitting room. The left foot presented large ulcers over the stump of the foot, and practically all the metatarsals were gone. On the right foot the toes and the distal parts of the metatarsals were absent. There were large ulcers over the stump of the foot. All sensation to pain and temperature is absent up to the level of the malleoli of both feet. There is a small area of delayed sensation over the distribution of the third sacral nerve, and a slight spasticity of the left lower extremity.

X-rays reveal an absence of phalanges and metatarsals of the left foot, and of the phalanges and distal portions of the metatarsals of the right foot. Plates of the spine reveal multiple deformities of the vertebræ and spina bifida occulta of the lumbar and sacral vertebræ. There are also multiple deformities and fusions of the ribs. The urine and blood examinations were normal; blood Wassermann 4+.

Comment: The x-ray appearances are those usually associated with leprosy and not those asso-

ciated with syphilis. The findings are also identical with those of neurologic conditions, especially syringomymelia. In view of the fact that we have no further stigmata of syphilis or leprosy, and on account of the early onset of the condition, we believe it to be a case of trophic osteoarthropathy.

A TREATMENT FOR SEVERE EPILEPTIFORM SEIZURES

G. BURCH MEHLIN, M.D.

PEDIATRIC DEPARTMENT

JAMES WHITCOMB RILEY HOSPITAL

R. M., a boy eight years of age, was sent to the Riley Hospital on September 5, 1929, with the complaint of frequent attacks of uncontrolled laughter. The family history was negative for mental and nervous diseases. The *present illness* started three weeks prior to admission and the attacks occurred from two to seven times a day each one lasting from one to three minutes. Hallucinations were common during a seizure. The mother claimed that one week prior to the onset the boy fell six feet from a tree. The boy states that he fell from the tree during an attack and that he fell feet first in a pile of hay.

Examination: Physical examination showed a fairly well-nourished and developed child weighing fifty-five and one-half pounds. He seemed rather dull and did not take much interest in his surroundings. At the time of admission he complained of frontal headache and had one attack in the admitting room. The physical examination was essentially negative. There was an absence of patellars and Rabinski reflexes. The gait and station were undisturbed. The laboratory examination was as follows: Complete urine, negative. R. B. C. 4,900,000. Hgb. ninety percent, and W. B. C. 6,300. The blood and spinal fluid gave a negative Wassermann reaction. The spinal fluid was under a pressure of fifteen mm. of water and resulted in a negative smear and culture and the gold curve was within normal limits. X-ray of the skull showed no evidence of injury. Examination of the fundus showed no evidence of pathology.

Course: The patient was placed upon a normal child's diet with luminal grs. one-fourth t. i. d. The attacks occurred seven times during the first day and gradually increased in both frequency and severity and usually were associated with urinary incontinence. In three weeks' time the character of the attacks changed completely. The child no longer laughed, the attack would be preceded by a cry, then the patient would become rigid and fall if standing and would terminate in a few minutes with a severe tremor, usually upon the left side. The attacks finally occurred as often as every five minutes and the patient was stuporous

throughout. He refused food, took fluids freely and ran a temperature up to 101 degrees. At this time the patient was placed upon a special dietary regime and received forty-three cc. of thirty percent cream every four hours and only occasional pieces of cracked ice. The patient was having convulsions every few minutes. Jacksonian in type, more marked on the left side and later generalized with the eyes turning to the left. The left arm and leg were definitely paretic, a left Babinski was present and both patellars absent and unchanged biceps and triceps.

These attacks were not controlled by luminal or amytal. After five days of this treatment the attacks had subsided completely, but, of course, the patient was much exhausted and badly dehydrated. He was then placed upon a ketogenic diet with fluid restriction to approximately 800 cc. Two days after this change the urine reacted positive for the first time, to the ferric chloride test for acetic acid. Since this time the patient has been symptom free and now weighs fifty-nine and one-fourth pounds.

The case is presented as a case of epileptiform seizures of unknown etiology which apparently responded to a treatment consisting of dehydration and starvation. As a result of this treatment undoubtedly a state of acidosis and ketosis resulted.

This type of treatment was suggested by an article by Irvine McQuarrie of the University of Rochester in the September number of the *American Journal of Diseases of Children*. It was his opinion that the epileptiform seizures were associated with a tendency of the subject to retain water. When diuresis followed the seizure, it favored the prevention of further seizures temporarily. The fasting diet consists of two cc. of thirty percent cream per kilogram of body weight every four hours. After treatment consisted in the establishment of a water balance at a much reduced level. This level consists in the patient receiving between fifteen and thirty cc. of fluid per kilogram of body weight per twenty-four hours.

The boy offers nothing of special interest at this time, but I am happy to present him as a boy who appears quite normal and who today was examined and reported by our psychologist as being of average normal mental ability.

ECLAMPSIA

O. H. GREIST, M.D.

OBSTETRICAL DEPARTMENT, COLEMAN HOSPITAL

Mrs. B. C., age twenty-seven, a para six, was admitted to the Coleman hospital November 10, 1929, in coma, having had four convulsions the preceding day. Her last menstruation was about

the first of April, 1929, and she was thought to be due about January 5, 1930.

On the evening of November 8th she complained of nausea, but did not vomit; during the night she awakened complaining of intense headache and epigastric pain and was awake for the remainder of the night. On November 9th she had convulsive seizures at 10:30 a. m., 11:00 a. m., 11:30 a. m. and 9:30 p. m. Her local physician, called for the first time, gave her morphine in one-half grain doses following the third and fourth convulsions. Her blood pressure at this time was 220/140, and her urine showed a four-plus albumen. Throughout pregnancy this patient suffered from severe headaches, vertigo, constant drowsiness, spots before the eyes, and swelling of the feet, ankles, and hands.

The patient's general health in the past has been only fair. She has never been as strong as her appearance has lead others to believe, and has tired easily on exertion. She had the usual childhood diseases with good recovery. During childhood she had numerous sore-throats and several severe attacks of tonsillitis. In 1918 a tonsillectomy was performed, and since that time she has had no more tonsillitis until the past winter, when she had one severe attack. One of the sore-throats during her childhood was diagnosed as possibly being diphtheria. No history of scarlet fever could be elicited. She had influenza in 1918.

Menstruation began at fourteen years, has been regular, and has not been painful. Married in 1919. The first pregnancy terminated with a miscarriage at seven months. At the second pregnancy a full-term living baby was delivered, but the patient suffered from four post-partum convulsions. During the third, fourth, and fifth pregnancies the patient was under a doctor's care throughout the pregnancy. During all of these pregnancies after examining the urine the doctor told her that there was some kidney trouble present. However, there were no convulsions, and full-term normal deliveries resulted. Throughout this present pregnancy the patient had no medical care until the onset of the convulsions.

The patient was brought into the admitting room on a stretcher. She was of a broad plethoric type with flushed cheeks, and of moderate adiposity. The pupils were equal, moderately contracted, and reacted to light. Heart and lungs were normal. The fundus was twenty-three cm. above the pubis. There was moderate edema of the feet, hands, and face. Respirations were twenty-eight per minute and rather labored.

Urinalysis showed a specific gravity of 1.025, acid reaction, three-plus albumen, and coarsely granular casts. Blood drawn for analysis showed a urea content of twenty-five mg. per 100 cc., method of Marshall. Kidney function test by the

phenolsulphonphthalein method showed an efficiency of thirty-five percent in two hours. Examination of the eye grounds showed marked edema of both discs and distinct passive congestion of the retinal circulation.

Immediate treatment was instituted consisting of gastric lavage with five percent solution of glucose and soda-bicarb; colonic flushing with five percent solution of glucose and soda-bicarb; 100 cc. of fifty percent glucose intravenously; and sodium amytal grs. $7\frac{1}{2}$ intravenously. After about six hours the patient regained consciousness and responded rationally to questions. The blood pressure had dropped to 150/105.

Treatment was continued with intravenous injections of glucose every six hours, colonic flushes twice daily, and sodium amytal in $7\frac{1}{2}$ gr. doses given at intervals to control the blood pressure and nervous symptoms. For three days there was apparently some improvement, the blood pressure remaining between 150/105 and 160/110 with the sodium amytal being used at more prolonged intervals. Urinalysis showed a sp. gr. of 1.011; alkaline reaction, albumen plus to two plus, and a reduction in the number of casts.

On November 14, 1929, the headaches and nervous symptoms began to return and sodium amytal had to be used more frequently. Medical consultation was secured and after a consideration of the impaired kidney function, retention of urea, and the past history of the patient it was decided to terminate the pregnancy. On November 15, 1929, a Voorhees bag was inserted and after about twelve hours labor began. An easy labor of twelve hours terminated with the breech delivery of a three-pound infant forty-four cm. in length. Respiration was started with difficulty and after a period of four hours the baby died of respiratory failure.

For four days following the delivery the same treatment was continued as had been used since the admission of the patient. There was a rapid improvement with a complete absence of headaches and nervous symptoms, and the blood pressure fell to a level of 116/95 to 125/100. Casts disappeared from the urine and albumen was present only as a strong trace. From this time the patient had an uneventful recovery and was discharged on November 28, 1929.

This case of eclampsia is atypical in that it failed to respond to medical treatment and interruption of pregnancy had to be resorted to. In the majority of such cases as seen under hospital conditions the above treatment gives rapid relief of symptoms and it is possible to carry the cases to full term with the delivery of a viable child.

CORONARY THROMBOSIS

(With Especial Reference to Digitalis Therapy)

R. A. SOLOMON, M.D.,

MEDICAL DEPARTMENT

Three years ago I presented a paper before the Indianapolis Medical Society on the subject of "Acute or Sudden Occlusion of the Coronary Arteries," emphasizing its symptomatology and diagnosis and reporting several typical cases that recovered. This evening I wish briefly to review this paper and to consider especially the question of the use of digitalis in the treatment of this disease.

The causes of acute obstruction of the coronary arteries are, thrombosis in a great majority of cases, and rarely an embolus. The source of such embolus is either the vegetation on one of the valves on the left side of the heart, mural thrombus, or a thrombosis somewhere in the pulmonary circulation. When due to thrombosis it always occurs in an artery that previously has undergone arteriosclerotic changes, especially an endarteritis resulting in narrowing of the lumen and roughening of the intima. In such an artery the thrombus begins to form and grows until it occludes the vessel, producing an infarct in that part of the myocardium supplied by that vessel. The site of such thrombus may be in any of the branches of the right or left coronary arteries, but the anterior descending branch of the left coronary is the one usually affected.

The etiology of the underlying coronary disease is not known definitely, but is probably the same as that of arteriosclerosis in general. The sclerosis may be limited to the vessels in the heart, or it may be part of a wide-spread process. It occurs most commonly in the male sex after middle life, reaching its greatest incidence between fifty and sixty and then gradually falling. The patient usually is strong physically, of the robust, muscular type, and there is often a family history of vascular disease of some kind. Some of these patients give a history of frank attacks of angina pectoris; others show a group of symptoms and findings which we describe under the term "coronary sclerosis."

The symptoms indicating the occurrence of a coronary occlusion are somewhat as follows:

After some slight effort, or even while lying quietly in bed, the patient is seized suddenly with a severe, agonizing pain in the center of his chest, with or without the characteristic radiation to the shoulders and arms. The pain is described variously by the patient as crushing, gripping, stifling, or clutching. He knows immediately that the pain is different from any pain of his past experience. It is deep-seated and located beneath the upper portion of the sternum, or at times appears to be entirely below the diaphragm. The

patient becomes prostrated and appears to be in a state of collapse and shock. The face shows distress, anguish, apprehension. He becomes pale or ashen gray in appearance and a cold sweat breaks out on his skin. Cyanosis is not common. Occasionally the skin shows a red flush. The pain does not let up in the course of minutes, as in an anginal attack, but lasts for hours or even days and is not relieved by nitrites. Nausea and vomiting may occur, resembling an attack of acute indigestion. Dyspnoea is a prominent symptom in many cases, often greatly out of proportion to the findings in the heart and lungs, but orthopnoea is uncommon. The pulse becomes small and thready, the rate ranging from 90 to 120, with frequently an arrhythmia. There is evidence of weak cardiac action, the sounds over the precordium having a tic-tac quality, or seeming very distant, with occasionally the first sound entirely inaudible. The heart is enlarged moderately and there may be a gallop rhythm. In a small number of cases a pericardial friction rub develops during the first two or three days, and is then very diagnostic. During the course of the first several hours a marked fall in blood pressure occurs either suddenly or gradually, and its later curve offers a good prognostic sign. Moist rales occur commonly at the bases of the lungs. The liver may become engorged and tender and a slight icteric tint of the sclera appear as a result. There may be muscle spasm and tenderness in the upper abdomen. Evidences of embolism may occur, but oedema of the extremities is not common. Within a few hours a leucocytosis of 15,000 to 20,000 develops and later a temperature of 100 to 101 degrees generally occurs. The urine shows nothing characteristic, but in quite a few cases a transitory glycosuria has been noted. Following recovery the patient is free from anginal attacks because of the lowered blood pressure.

The differential diagnosis of the condition is very important. First, it must be differentiated from angina pectoris because the treatment and prognosis are entirely different in the two conditions, and cervical sympathectomy is contraindicated definitely in coronary occlusion. The increase in pulse rate, the fever, the leucocytosis, the failure of response of the pain to nitroglycerine, the marked fall in blood pressure, and the long duration of the pain in coronary occlusion would be contrasted sharply with the sudden pain of a few minutes' duration, brought on by effort and relieved by rest or nitroglycerine, with no increase in the heart rate, no fall in blood pressure—probably an increase—normal heart sounds on auscultation, no fever or leucocytosis in angina pectoris. Second, the condition may simulate closely an acute surgical abdomen and even laparotomy performed for the relief of some supposedly intra-abdominal lesion. When one re-

members that the excruciating pain may be in the upper abdomen, accompanied by muscle spasm and tenderness, with nausea and vomiting, fever and a leucocytosis, with a slight jaundice and symptoms of shock, the similarity to acute pancreatitis, ruptured peptic ulcer, or gallstone colic becomes apparent.

The prognosis depends upon the size of the vessel occluded, its location, the amount of collateral circulation, the condition of the myocardium, and many other factors. Herrick described four groups of cases: First, where death is instantaneous and may be entirely painless; second, where the patient lives from a few minutes to a few hours. Death in these two groups occurs before the physician arrives, as a rule. Third, where the patient lives for hours, days or months, and may recover from the attack. Fourth, the group in which symptoms are mild with little or no pain. These usually are due to obstruction of a small vessel. The length of life after the attack averaged two years in White's series of cases at the Massachusetts General Hospital.

In the recent developments on this subject recognition of the milder and even painless attacks is being stressed. We are making the diagnosis on fewer and less severe symptoms than formerly. Another development has been the recognition of certain characteristic changes in the electrocardiograms which are fairly diagnostic of cardiac infarction. These include changes in the ventricular complexes, in the T-waves, and especially in the R-T interval with the high take-off of the T-wave. Especially important if one happens to have a previous electrocardiographic record of the patient, is the comparison with the tracing taken after the attack. During the past summer Dr. Arlie Barnes of the Mayo Clinic, one of our own graduates, by checking a large number of his electrocardiograms with autopsy material, has been able to predict the site of the infarct in the heart muscle in his cases. He feels that when he has more material on this subject he will be able from his tracings to offer a prognosis in a given case.

In the treatment of this disease all writers agree that rest in bed for a prolonged period of time, and morphin for the relief of pain, are the two essentials. For cardiac stimulation, caffein sodium benzoate and adrenalin are recommended, and for circulatory collapse, camphor, strychnin and metrazol have been used. Digitalis is said to be contraindicated, or when used at all should be used very cautiously in small doses with the onset of congestive failure. This is based upon such theoretical considerations as that digitalis would increase the contractions of the heart and raise the intracardiac pressure, increasing thereby the lia-

bility of rupture of the infarcted area, with death to the patient.

My experience with digitalis in coronary occlusion began accidentally. Years ago I saw a patient with an acute, painful heart failure. There had not been much written on this subject at that time. I did not recognize the condition as one of coronary obstruction, and finding the patient *in extremis* I gave digitalis intravenously and followed it with large doses subcutaneously in the first thirty minutes. This patient was then removed to a hospital where, after a stormy course of about six weeks, she made a good recovery. Later, as the literature on the subject began to appear more frequently, I realized that this had been a case of acute coronary occlusion. The next case of this disease I had I treated intentionally with large doses of digitalis, giving half the calculated dose for that patient in the first twenty-four hours and getting him completely digitalized in the first two or three days. This patient also made a good recovery. This, of course, made me more enthusiastic about the use of digitalis in this disease and I used it on a series of cases with more recoveries than the usual statistics would justify. I then treated some cases without digitalis in order to compare the results.

In conclusion I would say that as a result of my experience with digitalis I believe it is indicated in the treatment of coronary occlusion. The mortality is lower, the course of the disease is less stormy, and the patient withstands the shock much better.

OSTEOPLASTIC REPAIR OF THE SKULL

PRELIMINARY REPORT

JEWETT V. REED, M.D.

DEPARTMENT OF SURGERY

E. D., age thirty-seven, was admitted to the Robert W. Long Hospital August 30, 1929, complaining of a defect in his skull and epileptic seizures. The history revealed that this man was kicked by a mule in 1922, received a compound fracture of the right frontal region, which was treated and finally healed. About four years later he began to have epileptic seizures. A physician in Louisville explored the defect and applied a fasciata graft; no bony repair was attempted at that time. The epileptic seizures returned about a month following the operation.

Our examination showed a pulsating defect of the frontal bone. Patient also had several epileptic seizures, occurring about every three to five days, but the defect being quite a distance from the motor area, a Jacksonian epilepsy seemed impossible.

On September 11, 1929, the fascial graft was removed, the edges of the bony defect smoothed, and a periosteal bone graft the same size of the

defect was removed from the adjacent area of the skull. The periosteum of the defect was then sutured to the periosteum of the transplant and the entire wound closed without drainage. The wound healed *per primam* and the patient was discharged practically well on September 29, 1929. The patient had a slight epileptic seizure the day following operation, the only one during the rest of his stay in the hospital. These probably are nervous attacks and entirely under the control of the patient.

THE REACTION OF THE PERITONEUM TO TRAUMA AND CONTAMINATION: THERAPEUTIC VALUE OF AMNIOTIC FLUID CONCENTRATE*

PRELIMINARY REPORT

HAROLD M. TRUSLER, M.D.

DEPARTMENT OF SURGERY

This is a preliminary report of experimental studies which are still in progress. The reaction of the peritoneum to trauma and the resistance of the peritoneum to bacterial invasion always have been subjects for study and speculation. Notwithstanding the countless investigations and clinical observations of past years there is yet much to be learned. It is understood generally that aseptic trauma to the peritoneum gives rise to a reaction tending to produce healing with the formation of scar tissue adhesions of greater or less degree. If in addition to trauma there is bacterial contamination of the peritoneum the healing process is complicated by infection, or peritonitis. In the broadest sense the term "peritonitis" may include the reaction of the peritoneum to injury, whether it be simple trauma, chemical irritation, or infection. That simple contamination of the normal peritoneum with living pathogenic bacteria necessarily does not produce peritonitis is a matter of common knowledge. If, however, the peritoneum is subjected to injury, then in the presence of contamination a peritonitis develops that may be fatal. These facts offer some explanation for the clinical variations in the development and course of peritonitis in the human patient. Obviously, however, there are many other factors poorly understood. We feel that our experimental observations may cast some light upon these questions.

Our attention was first called to the subject by the work of Johnson,[†] who conceived the idea that amniotic fluid might be effective in the prevention of postoperative abdominal adhesions. He, with the aid of others, conducted experiments on guinea pigs, subjecting them to laparotomy with trauma

*Amniotic fluid concentrate is a filtered, fractionated, sterile preparation of bovine amniotic fluid concentrated five to one and prepared for clinical trial by the Eli Lilly Company.

[†]Johnson, Herbert L.: "Observations on the Prevention of Postoperative Peritonitis and Bacterial Adhesions." S. G. and O., November, 1927, p. 612.

to the peritoneal surface of the intestines. Their observations clearly indicated that the intraperitoneal use of amniotic fluid gave the treated series better healing, fewer adhesions, and lower mortality than a similar series of untreated controls. We have checked their results on a large series of guinea pigs and in addition have been able to study the mechanism of its therapeutic effect more accurately by numerous observations in dogs. Full reports are not ready for publication at this time. Our findings at present, however, lead us to conclude that amniotic fluid when placed in contact with traumatized peritoneal surfaces stimulates the peritoneum to a reaction which greatly facilitates healing, thereby minimizing the formation of postoperative adhesions. The mechanism of this reaction will be discussed in detail in a later publication.

A more important phase of the investigation was suggested to us by the fact that the death rate from peritonitis and intestinal obstruction in the treated animals was markedly less than in the controls. Following up this suggestion we have conducted a long series of experiments on dogs in which massive cultures of virulent pathogenic bacteria, namely, staphylococci, streptococci, and colon bacilli, were injected into the peritoneum of these animals immediately following the traumatizing procedure. The animals in the untreated control series showed a high death rate from peritonitis; the animals receiving the intraperitoneal injection of amniotic fluid concentrate showed a much lower death rate. It would appear that the

same reaction which stimulates healing of the peritoneum in the absence of contamination will at the same time increase the local immunity factors and tend to prevent the development of peritonitis in the presence of contamination.

Clinical Application: We feel that the results of our experimental work already indicate that this preparation of amniotic fluid will have a beneficial action on the peritoneal healing following any abdominal operation. It will, however, be more especially beneficial in operations in which inflammatory adhesions are encountered and separated, thereby leaving excessive raw surfaces in the peritoneum. In addition to that it should be expected to facilitate healing and to prevent the development of peritonitis following gastrointestinal surgery and other procedures which lead to contamination of the peritoneum. As to how much benefit we may expect to gain in cases which already exhibit far advanced peritonitis at the time of operation, we are not as yet prepared to state.

The preparation known as amniotic fluid concentrate already has been subjected to extensive clinical trial by Johnson and his co-workers, who have employed it in all types of abdominal operations. Our own series is as yet too small to report. One fact, however, is outstanding: there is never any indication that the use of the product is harmful. It is, of course, difficult to evaluate the clinical results from such material. It is noticeably true, however, that patients in whom the product is used typically show a smooth convalescence.

These observations, substantiated by an immense amount of experimental work on animals, lead us to expect that amniotic fluid concentrate has definite therapeutic value.

TEACHING OF MEDICINE

RALPH H. MAJOR, Kansas City, Kan. (*Journal of the A. M. A.*, April 27, 1929), in a paper read before the Annual Congress on Medical Education, Medical Licensure and Hospitals, February 18, 1929, says that a physician should be not only a doctor but an educated man, and that the standing of the profession will suffer if we turn out a lot of doctors who have galloped through the college and medical course. The degree of M.D. should indicate a certain educational and intellectual status. It means that the possessor of this degree has slowly and often painfully trudged up the difficult and winding path of knowledge until he has reached a certain summit—not that he has taken the funicular and arrived there in half an hour. Major says that he tries to teach the student the technic of taking a history, making a physical examination, carrying out the simpler laboratory tests and then, after these details have been mastered, of proceeding to the diagnosis and treatment. The physician should first know the symptoms manifested by a patient even if the diagnosis is not apparent, for once he is sure of his observations he can, by reference to his books, usually make a correct diagnosis even when the disease is one of which he has not even heard. Medicine is not learned by diligent cramming over the midnight oil but by what one might term the "episodic method"—teaching of medicine as a series of episodes, at first per-

haps unrelated, but later assuming the appearance of a connected story, or a well rounded experience as the episodes multiply. There is no doubt that medical students, like many physicians, attach undue importance to the laboratory. While we stress clinical instruction in medicine, if necessary, to the partial curtailment of didactic courses, we believe the latter have a limited but definite place in the medical curriculum. The question of the proper textbooks in medicine is a constantly recurring one, and to both student and teacher a very complex and often perplexing problem. Medical books are to be used as reference works and not as repositories of medical dogma which must be memorized and defended like the catechism. An effort is made to show that the clinical picture of a certain patient is the thing to fasten first in one's mind, and then one's knowledge may be extended by reading the composite picture of this disease presented in the textbook and noting wherein the condition of this particular patient resembles the usual picture and wherein it differs. Students should be encouraged to read good medical biographies. This historical method has a great teaching value. One lesson to impress on the student is that the patient consults him because of pain or discomfort, and that if a cardiac patient is seen in the late afternoon it is more important at that time to give the patient a comfortable night's sleep than to learn whether he has a mitral stenosis or an aortic insufficiency.

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EDITORIALS

SPINAL ANESTHESIA

For a considerable number of years spinal anesthesia has been advocated by a limited number of surgeons as a reliable type of anesthesia for selected cases, particularly for operative procedure in the lower extremities and lower abdomen. Recently the number of surgeons using spinal anesthesia has increased greatly and the field of its use extended widely. Its availability as a safe and useful method of anesthesia no longer can be denied. The slowness of the profession in using the method probably is due to a lack of interest on the part of trained anesthetists. Trained anesthetists, whether nurses or physicians, have but little understanding of any kind of anesthesia except inhalation anesthesia. On the other hand, surgeons as a rule have grown to be very dependent on the trained anesthetist and are quite willing to follow his lead in methods of anesthesia. Also the trained anesthetist has done such a good job of his work with inhalation anesthesia that any other type must be of exceeding high merit if it is to make headway.

Any knowledge which one may have possessed with the use of other types of anesthesia, especially inhalation anesthesia, is of no value in the use of spinal anesthesia. A completely new group of physiological reactions have to be taken into account in order to understand spinal anesthesia technique. No one should undertake its use without a careful study and a full understanding of the anatomy and physiology of the central and sympathetic nervous system. Failure to understand exactly how and why the anesthetic agent acts when deposited in the subarachnoid space undoubtedly accounts for some fatalities and many failures. Ten years ago the writer witnessed the death of a patient under spinal anesthesia. This occurred at a time before clinical and experimental research had demonstrated the action of the drug when placed in the subarachnoid space. At that time it was taught that circulatory failure was produced by the drug ascending to the medulla and paralyzing the cardiac center. The patient

was therefore put in the upright position, exactly the reverse of what we now know should have been done. Circulatory failure, as evidenced by lowered blood pressure, we have learned is not due to medullary paralysis but is due largely to a block of the sympathetic fibers from the first thoracic to the third lumbar segments, thus a splanchnic paralysis and a pooling of the blood in the vessels of this region. The upright position only complicated the situation by adding a medullary anemia which further embarrasses the cardiovascular systems and probably produced the death of the patient to which we have referred.

Spinal anesthesia has a distinct and valuable place among other methods of anesthesia, and only awaits a better understanding for an extended use.

THE WELFARE CLINIC

We suggest that to offset the objections to welfare clinics under lay control, the reputable medical men in every community unite with the reputable hospitals and the organized charities of the community in maintaining welfare clinics for the care of the indigent and worthy poor at fees that are reasonable and consistent with the ability of the patients to pay. One or more days each week could be set aside by the individual hospitals for patients who desire to patronize the welfare clinics, and, except in emergency cases, patients should be required to have a preliminary examination to determine the nature and extent of the services needed, and then an appointment for a subsequent date for the rendering of such services. In the interval, some trustworthy agency can investigate the individual cases and determine the financial ability of the patient to pay. If the patient is indigent, then the community or some organization should pay the necessary overhead for the medical and surgical care. Those able to pay something should be required to do so, with a view to permitting the patient to retain his self-respect, and also for the purpose of discouraging dependency and pauperism. If hospital service is required it should cover the necessary service only, with no frills, and hospitals should be willing to furnish such service at cost. Anything over and above actual hospital cost that is collected from the patient should be allotted as compensation to the attending physicians or surgeons. Those rendering medical and surgical attention should be the members of the hospital staffs, and the work among them should be divided into services at specified times, so that there will be no occasions for dissatisfaction, jealousies, or friction. In communities where more than one hospital exists, the welfare clinic days may alternate between the hospitals. The plan may need some modifications to fit in with certain communities and conditions, but on the whole it meets the demand

for trustworthy services to the indigent and deserving poor at the hands of competent medical men, and the service is under the absolute control of the medical profession rather than the lay public.

We do not believe that welfare clinics outside of hospitals, even when run by reputable medical societies, can be made successful in any considerable number of instances, and for the reason that to be successful from an economic standpoint it is necessary to have physical equipment such as already owned by the hospitals and the duplication of which would commercialize the whole proposition, and defeat the real purpose of the clinic. Perhaps to that could be added the difficulty in having any group of medical men harmoniously conduct a clinic for which they are responsible financially for the overhead expenses. There also would be the difficulty in securing cordial cooperation in keeping down petty jealousies and professional ill feeling. Of first importance is the advisability of creating welfare clinics that are not under lay control, and which serve the purpose of giving the poor and indigent efficient and trustworthy medical and surgical service at a cost that can be borne by the patients or the community. Run in connection with reputable hospitals, the welfare clinics can be made satisfactory and efficient, while at the same time guided and controlled by the medical profession.

POSTGRADUATE COURSES

It is with some chagrin that we admit that postgraduate courses in Indiana, sponsored by the state medical association or by the University School of Medicine, have not been howling successes or sufficiently popular to stimulate a demand for them. In many other states, and particularly in some of the adjoining states, postgraduate courses not only are a decided success but are in great demand by county medical societies or groups of men who desire to secure advanced instruction. Some of the county medical society secretaries complain that they have great trouble in stirring up any enthusiasm or interest in society programs, and that in consequence their organizations in a large measure exist in name only, or if they do make any pretense of holding regular meetings, such meetings are of a perfunctory character and of little scientific value.

Why not put outside talent on the programs of county medical societies and thus encourage attendance at meetings, or, better still, why not arrange for a good, practical, postgraduate course and have it sufficiently varied to meet the tastes of all or a majority of the members of the society? The University School of Medicine will attempt to furnish capable men to conduct such courses, or the Indiana State Medical Association,

through its executive offices, will be pleased to make arrangements for such a course if application is made to the executive offices and wishes made known as to the kind of course desired. We also have another suggestion which we have borrowed from the programs of some other states, which carries with it the necessity of some capable and experienced men, accustomed to teaching, preparing themselves to give postgraduate instruction of a practical kind to classes made up of members of county medical societies or other reputable practitioners of medicine, with a definite charge for the same to cover expenses and give a modest honorarium to the one giving the course. To be most successful, these courses should be given by men of unquestioned ability and ethical standing. The bumptious exploiter and particularly the physician of questionable ethical standing, should be barred. Certainly if these postgraduate courses are successful in many other states and continue to be in demand, they should be successful and in demand in Indiana, for we have no reason to think that we are so much smarter than our confreres in other states or that we do not need the broadening influence of postgraduate teaching.

EDITORIAL NOTES

DEAR DOCTOR.

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely free to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve you.

HAVE you paid your dues? February first is the deadline. After that date you are delinquent and lose the perquisites that go with your membership in the Indiana State Medical Association.

Two new vitamins, not yet named, have been discovered recently by English scientists. If we keep on finding new vitamins, and determine the value of each as food for the human economy, we may solve many of our problems that have a dietary etiology.

THE governor is right in his decision not to give additional state funds to make up deficits caused by grafting of school funds. Now if he will stop pardoning so many murderers, hold-up men, and rapists, we may think that he is a pretty good governor after all.

AND now children are getting irradiated ergosterol, but it would be well to follow the advice of a well known pediatrician who says that actual experience with children indicates that some of them may be more sensitive to irradiated ergosterol than others in whom it may be harmful, despite animal experimentation which apparently indicates that the preparation is harmless in any dosage.

A CHICAGO physician who advertises himself as a beauty surgeon and who was found guilty of malpractice when he attempted to beautify a girl's legs and gangrene set in, is due to lose his license if the authorities of Illinois have their way. The fact that he is not of very good moral character and has a record of a prison term in New York may help to decide his right to practice medicine.

WHAT has become of our postgraduate courses in Indiana? Any county medical society can have such courses if it puts forth an effort to obtain them. The Indiana University School of Medicine will sponsor such a course, or ask our genial Tom Hendricks, secretary of the Indiana State Medical Association, to make suitable arrangements. Just name the course you would like to have and Tom will do the rest.

THE American Liberty League, Inc., of Chicago, says that children who are given antitoxin for diphtheria, and the treated children subsequently die, are legally murdered by the physician in attendance. Just why someone does not curb the author of such a statement is hard to understand. The best punishment would be a good thrashing, for an idiot like that has more respect for physical punishment than anything else.

UNCLE SAM was generous in giving a Christmas present to those paying income tax on earned income. We never have had to pay a very large income tax, but we are thankful that this year the amount will be cut down as the result of the reduction that went into effect and applies to the year 1929. Incidentally we are pleased to know that expense attending medical conventions can be deducted from income tax returns.

WE commend to our readers a book published by the Bobbs-Merrill Company, of Indianapolis, entitled "Medical Leaders from Hippocrates to Osler." The book is just what its title indicates, and will prove delightful and entertaining reading for physicians who should know something about medicine and surgery as practiced from medieval times down to the present and it gives some intimate information concerning our medical heroes.

LET the printers or the office cat take the blame for the idiotic way in which the index was printed in the December number of THE JOURNAL. Our printers have their grief, but so do editors! We apologize for the errors in mechanical makeup entrusted to those who know how to arrange forms for periodicals or books but occasionally "slip a cog." If anyone desires an extra copy of the index for use in binding, same will be supplied, without charge, by addressing THE JOURNAL.

THE Indiana law now allows the physician making the statement accompanying the allegation of insanity three dollars, and the two medical examiners for making out the certificate and attending the hearing three dollars per day and ten cents per mile for each mile necessary to travel to make such examination or attend such hearing. A boy running an elevator makes more than three dollars per day as a usual thing, but the professional services of a physician are placed below the services of an elevator boy.

AN advertising agency with whom we have had no dealings has asked us to publish a free reading notice concerning a new proprietary antiseptic which a client of the agency is putting on the market. Therapeutic indications, price and other information are given in the reading notice. It takes a lot of nerve to make such a request, but leave it to the average advertising agency to ask for unusual and gratuitous favors. It reminds us of the fellow in the olden days who got a free lunch without buying a glass of beer.

ALONG about the first of the year one of our medical friends remarked, "I am busier than a tax assessor, for I am getting out my annual statement to patients and it is some job." We could not help telling our indifferent friend that he is, from the standpoint of example, a disgrace to the medical profession because he is doing an infinite amount of harm to himself as well as to his patients. Monthly statements are the rule with most physicians, and as a matter of fact there are many people who will refuse to patronize a physician who does not send out statements the first of every month.

JUST as long as physicians, boards of health and school physicians fail to do their duty in urging people to be vaccinated, we are going to have smallpox in Indiana. There has been altogether too much laxity in the consideration of this matter. No child not recently vaccinated should be permitted in our public schools. If the Christian Scientists and anti-vaccinationists refuse to have their children vaccinated, then let them herd their youngsters together. A few cases of smallpox in the families of Christian Scientists and

anti-vaccinationists will cause such families to have a wholesome respect for vaccination and our health laws.

THE retail, wholesale and manufacturing pharmacists are becoming interested in the threatened plan to do away with the private practitioner of medicine, and for the reason that if the practice of medicine is in the hands of industrial concerns, insurance companies, or the government, a very large percentage of the business now going to the pharmacist will be cut off entirely or diverted to concerns that are owned and controlled by the organizations that are monopolizing medical practice. Incidentally, the American pharmaceutical manufacturers' association is starting an advertising campaign with the slogan, "Keep well. Consult your family physician."

A PHYSICIAN writes us that he recently has returned from a year in Europe where he studied under some famous masters and equipped himself in an unusual manner to care for patients in his chosen specialty. He further announces that he will be found at a certain address, at certain hours, and invites the profession and public to extend patronage. He winds up with a request that we courteously publish the announcement as given. Certainly, as a seeker for free advertising he exhibits monumental nerve exceeding anything we have encountered heretofore. Like the Irishman, we are "naming no names," as that would suit the self-exploiter's purposes altogether too well.

SOME recent investigators have had so much to say concerning the etiology of influenza, based upon bacteriologic research, that the lay press has given the erroneous impression that our problems concerning influenza have been solved and that now we may expect a vaccine or serum to banish influenza as we were able to banish diphtheria. *The Jour. of the A. M. A.*, of December 28, 1929, editorially says, "To intimate, as was done in numerous interviews, editorials and other publicity relative to this discovery, that the way is now clear for a vaccine or antitoxin or any other specific method of treating influenza, is to go far beyond the actual evidence provided by this bacteriologic research."

IN a special report before the Section on Ophthalmology at the Portland session of the American Medical Association, July, 1929, a committee on optics and visual physiology declares that the diagnosis of eye symptoms and the treatment of eyestrain should, so far as possible, be done by men and women educated in medicine. The reasons are set forth clearly, and it would be well for all practicing physicians to pay some attention to

the recommendations, in the interests of better service to their patients who oftentimes pay the penalty for having their refractive errors given attention by non-medical men who frequently overlook serious eye pathology which should be given early treatment.

THE medical profession seems to have gone crazy concerning serums and vaccines. There is considerable evidence to show that a large majority of physicians who are checking up their results are looking upon most of the serums and vaccines with disfavor, except in the prevention or cure of such diseases as diphtheria, scarlet fever and erysipelas. The conservative physician will follow the advice given by Kinsella (*Journal of the A. M. A.*, November 16, 1929), who says that it is far better to await the results of further study by those whose lives are devoted to investigation of this type of preventive and curative therapeutics than to plunge madly into the promiscuous use of vaccines and serums.

NOTHING so hurts the individual practitioner of medicine and indirectly the entire medical profession as the superficial or "lick-and-promise" examination given by some physicians. Some well-trained physicians, as well as others who are not so well trained, occasionally guess right when they jump at conclusions, but more often they fail to do justice to themselves or their patients, and rightfully secure the disrespect and ill-will of the public. The majority of people expect a trustworthy opinion and for the most part are willing to pay fairly well for it. On the other hand, the physician owes it to himself as well as to his patient to give trustworthy advice and service, and he cannot do that and be superficial in his thinking or habits.

ONE of our pet peeves is to be furnished with information to the effect that a Christian Scientist has refused to obey our health laws concerning quarantine of communicable disease, and gets away with it. That has happened in Indiana. We have no objection when a Christian Scientist elects to expose himself to smallpox, scarlet fever, diphtheria, or any other communicable disease, for we know they are just as susceptible as any other class, and it probably would be a good thing if some Christian Scientists would contract a communicable disease, as it might establish in their minds a question of doubt as to the consistency and rationality of the teachings of Mrs. Eddy, but we do object to having Christian Scientists carrying disease to others when it can be prevented.

WE agree with the editor of the *Illinois Medical Journal*, December, 1929, that President

Hoover has shown poor judgment in failing to recognize the medical profession in his appointment of a committee for work on the question of the health and protection of children. Neither the American Pediatric Society nor the American Medical Association were asked to cooperate. A sum of \$500,000 from private sources has been placed at the disposal of the president to cover the expenses of the preliminary committee, the councils, and the follow-up work which will be required to carry out the conclusions. In all, the committee comprises sixteen men and eight women, not a one of whom is recognized as practicing medicine, and only two of whom really are known to know anything about medicine.

ON Christmas day a small boy in one of our Indiana cities received an air gun as a Christmas present. Before the day was over he had received a severe eye injury that will impair sight in that eye for life. Just a year ago a similar incident occurred and in that case the injured eyeball was removed. Probably those cases are only two out of many similar ones that have occurred in Indiana during the past twelve months. When will we ever secure the enactment of a law that will prohibit the sale of air guns as also prohibit the possession or use of fire arms by children? Such a law is just as necessary as a law prohibiting children from driving automobiles. Why should not the medical profession take the lead in securing such legislation? The manufacturers will object but should their interests be considered?

IN an article in the *Jour. of the A. M. A.*, for August 10, Buka recommends more rational footwear for both sexes, and this leads the *British Medical Journal* (October 12th) to say that ever since civilized man abandoned the habit of going barefoot or wearing sandals, and first encased his feet in boots or shoes, he has had trouble, but that while efforts to produce and bring into use suitable shoes are laudable, the old proverb of the horse and the water comes to mind, and the modern young woman may be shown the reform shoes but cannot be induced to wear them. We might add that the English woman is far more sensible than any of the female sex in the United States when it comes to sensible shoes. In this country the average woman will wear stilts if some arbiter of fashion so decrees.

It appears to us that the American Birth Control League has a good press agent. It needs such an avenue for extending its propaganda, but not every fish swallows the bait that is thrown out. Birth control may have its place, but when information concerning the subject is broadcasted by lay individuals and without regard to whom the information is given, infinite harm may result.

It is reported that a knowledge of harm already done by the League's activities was what led to a closing of the clinic in New York City, even though under pressure the clinic was reopened in a day or so. However, the laws of the state of New York are rather stringent and call for rather severe penalty for the promiscuous dissemination of birth control information, and it is probable that the League will be somewhat careful about its operations.

THE St. Louis Medical Society is honoring its members who have practiced medicine for fifty years or more, and intends to make it a yearly practice to honor members as they attain a half century of professional service. It is barely possible that some men who have practiced for fifty years are still physically and mentally young and will resent having attention called to their long period of service, attention to which may be thought detrimental. It is gratifying to know that now days fifty years of service doesn't mean very much, for some of the best work done by medical men, both in practice as well as in teaching and writing, has been done after the fifty-year period of service. Years do not count, and it is time enough to call attention to length of service when incapacity arrives or the still small voice calls to the final service in the land beyond.

SOME of the eastern medical societies are employing press representatives with a view to giving the public trustworthy information concerning the deliberations and findings of medical societies and in giving out such personal and news notes as seems entirely proper for lay consumption. Christian Scientists and all the pseudo-medical cults long have employed publicity agents of one kind or another to spread propaganda. In consequence the public has received an erroneous and oftentimes harmful impression concerning health problems, and until recently the regular medical profession has done very little to offset this misinformation. The Indiana State Medical Association has set a good example by establishing a Bureau of Publicity which now has operated several years most successfully and with a very keen appreciation on the part of press and public.

THE manager of the Better Business Bureau of Fort Wayne is patting himself on the back, in the public press, for exposing a fake scheme for collecting money for tickets to a benefit performance, but he neglects to do anything toward suppressing medical fakes and quackery as advertised in the daily press, and which defrauds a class of people who can ill afford the loss. To take a dollar or two wrongfully from an individual for a benefit performance of some kind is a serious crime in the eyes of the secretary of the Better

Business Bureau of Fort Wayne, and calls for punishment of the offender, but he who steals many dollars from sick victims by selling them a fake medicine or appliance that the seller himself knows to be next to worthless if not wholly so, evidently is considered a real benefactor and is not to be molested. Some consistency in that reasoning!

THE self-styled specialists, or as someone calls them, "the half-baked specialists", have come in for criticism from many sources, and it remains for E. J. Torey, in *Clinical Medicine and Surgery*, for August, 1929, to offer a remedy, which is as follows: "See that every medical graduate gets a diploma, and then keep him in general practice for at least ten years, for he should have the knowledge and experience obtained through such contacts in order to make him a safe advisor. Then, unless research work takes his time, let him have the right to take special work after passing an examination in his chosen specialty. The public will then know when they go to see him for their ailments that they are in the hands of a qualified and experienced man, instead of at the mercy of a self-styled specialist. It is the only way that the public can be protected, and respect for the general medical profession be maintained."

THIS winter Indiana physicians have had a taste of the discomforts and inconveniences of what some of the old timers call an "old-fashioned winter." One physician whose home is in one of the northern Indiana cities had his automobile stuck in eight feet of snow, ten miles from his home, and it wasn't until four o'clock on the following day that he succeeded in getting his automobile dug out and slowly wended his way home after some relief had been afforded by one of the state highway snow plows. In the vicinity of the blockade each farmhouse was offering shelter for from twenty to thirty stranded automobilists. The fact that there was a large amount of snow on the level and in drifts was not so much of a drawback as the blizzard and extreme cold which made traveling out of the question. Even the oldest inhabitants do not remember of experiencing such a blockade in traffic, and that means a good deal when you take into consideration our present paved highways which make it easier to travel than in the olden days.

Inasmuch as we sympathize with the county medical society secretary, who generally is not appreciated and whose task is entirely thankless, we wish to say a good word for him, and particularly when he is active, enterprising, and courteous. Give him your cordial cooperation and assistance in his effort to make your society amount

to something. Don't kick on the character of the program furnished when there is no valid reason for registering a kick, and don't object to a few dollars of extra expense as a tax when it means so much toward building up the social and scientific interests in your society. You pay the golf club or the bootlegger extravagantly as well as cheerfully, but most of you kick like a bay steer when it comes to paying anything that will help you in the practice of medicine or make you a more wholesome and agreeable fellow among your confreres. You will "cut your belt" for almost anything but your county medical society, and it is high time that you learned to "cut your belt" for the latter and do it willingly and cheerfully without being clubbed to it.

PHYSICIANS sometimes receive Christmas presents from grateful patients and no matter what such gifts are they are greatly appreciated. A few years ago a poor old woman sent the editor of THE JOURNAL a pair of long-wristed, old-fashioned mittens which she had knitted. The gift was in grateful remembrance of surgical attention administered months before. Not for the world would we have permitted that dear old soul to know that we had no use for the mittens, for that gift touched the heart more than anything received during the holiday period. Most of the Christmas giving is a sham, and represents insincerity because it is not from the heart but is given because the giver thinks he must give. The physician who receives a Christmas remembrance from some poor patron who would pay if he could, places that patient upon a pinnacle because the act is prompted by the heart, and the angels are going to turn their faces the other way if the physician sheds a tear or two in appreciation of the fact that sometimes the simplest token means more in satisfaction than a big fee.

IT is high time that medical school examiners get together in a sort of school and arrive at some definite conclusion as to just what health advice is to be given pupils in the public schools. One school physician sent a pupil home from school with a diagnosis that was contradicted by a very capable family physician. Another school physician talked glibly about malnutrition and improper diet to a pupil who comes from a family where well-balanced diet is a rule in the household, and the family physician who has cared for the family for years sticks up his nose and says, "Pay no attention to those d— fool medical examiners in the public schools." Some school physicians constantly are finding and magnifying defects in children, with the result of unduly alarming the parents. Is it any wonder that some of the families having children of school age get rather dis-

gusted with physicians in general when they discover so much difference of opinion as to what and what not shall keep a pupil out of school. Perhaps if the school physicians would get together and decide on a definite policy there would be fewer complaints concerning incorrect and irrational opinions.

AFTER the annual dinner meeting of one of the county medical societies in Indiana, the efficient and peppery secretary, who has served for several years and been re-elected, wrote the members in part as follows: "After the party was all over the three Yiddishers got together and one said, 'Merry Syphilis,' the next 'Clappy New Year,' and the third 'Gleetings.' And when the last medical meeting was over and some chronic kickers got out their copper-toed boots to kick about, first, paying a quarter extra for the turkey dinner, second, using moving picture instruction films, and, third, not having a real program, I decided this was as much the members' job to be responsible for the programs as mine, and from now on I am passing the buck to you. Because you wouldn't furnish me with papers and local talent I have had to get out-of-town assistance. Now you can either do it or do without it, or get George to do it for you, NOT ME. Let someone else sit on a tack for a while." Other pointed and humorous comments were made and indicated that so far as the secretary is concerned he is somewhat disgusted because he received so little cooperation and assistance from the members of his society.

SOME of the Indiana opticians are advertising themselves boldly as "doctors" by prefixing "Dr." before their names as appearing in advertisements, which of course misleads the public into believing that these glass fitters are capable of diagnosing and treating pathologic conditions of the eyes. In fact, we have been told by patients that they not only obtained their glasses from certain opticians but also had received eye drops for the treatment of supposed eye diseases. In one or two instances it was alleged that the opticians used prescriptions for medicine to be used in the eyes and such prescriptions were filled promptly by neighboring druggists. Very naturally no physician is going to accept the responsibility of furnishing evidence for prosecution, for he is not the one who is being harmed, and he does not relish obtaining a reputation of persecuting another on the general assumption that his own toes are being stepped upon. The job really belongs to the Board of Medical Registration and Examination, but it, too, has its hands full in trying to enforce laws, and largely because not sufficient money is appropriated for the enforcement of the medical practice act. In the meantime the public, which

in the final analysis is the one protected by any law, continues to suffer.

THE medical profession must make up its mind that industrial medicine and surgery must receive more careful and competent attention in the future than it has in the past. In one sense industrial medicine and surgery is a specialty in itself, and he who practices it must take into consideration not only industrial conditions and the legal phase of the matter as it pertains to both employer and employee, but he must have a workable knowledge of industrial conditions as they apply to disease and injury. Some industrial companies or corporations carry their own indemnity risks, whereas others employ an insurance carrier, and in either instance the question of putting the employee back to work in the shortest possible time and in the best possible physical condition necessitates skilled service and analytical judgment of all of the conditions pertaining to employment with a view to economic saving not only for the employee who may be losing a portion of his wages as a result of his sickness or injury, but the employer who is losing the services, and the insurance carrier who is called upon to pay the cost. Perhaps in no other work does the incompetent surgeon show up so unfavorably as in the results of industrial surgery, and if the best results are to be secured the man selected for this work must be one who has been well trained, possessed of good judgment, and unquestioned honesty.

EVERY thrifty mechanic, laborer, or person belonging to the class known as being in moderate circumstances usually has a thrift or savings account. If he encounters illness, that account is drawn upon and sometimes exhausted, but, as pointed out by one of the surgeons at a recent meeting in Chicago, the first one to draw upon that account is the hospital, and not infrequently the entire savings goes to the hospital and the physician gets nothing. Accordingly, the plea is made that people in moderate circumstances should be discouraged in seeking expensive hospital accommodations with all of their unnecessary frills, not alone because the saving in money would enable the patient to pay the members of the medical profession rendering service, but false standards would be avoided. One of the surgeons offered the suggestion that if a moderately circumstanced patient will put away false pride and go manfully into a hospital ward instead of whining for a private room his financial worries will be reduced largely and his recovery probably will be speedier. In well-conducted hospitals the average ward patient receives decidedly better care than the average private patient no matter how rich the latter may be. To this may be added the observation that false pride and the morbid

solicitude of the family of the patient is what leads to excesses in the cost of illness. Physicians ought to do more toward popularizing the wards in our hospitals.

IN the *New York State Journal of Medicine* for October 15, 1929, Dr. Edward G. Lear discusses the pathologic effects of the ultraviolet rays on the eye, and reports some interesting cases, the details of which are worth remembering. In the first case a young man suffered from periodic attacks of photophobia and irritation of the ocular and palpebral conjunctiva, which prevented him from doing eye work and caused considerable discomfort. By a process of elimination it was discovered that these attacks followed so-called treatment by the ultraviolet rays given after a massage and bath at the Y. M. C. A. In the second case an office attendant suffered from eye inflammation as a result of the effects of ultraviolet rays while holding a baby undergoing treatment with ultraviolet rays. No protective glasses were worn. In the third case a workman who was not engaged in welding but was employed a short distance away from a welder found himself suffering from irritability of the eyes whenever he worked in the vicinity of the welder.

These cases indicate the necessity of making a careful search for the etiological factors in the production of a recurrence of irritability about the eyes. It would be an easy thing to overlook the cases that follow exposure to ultraviolet ray administered in Y. M. C. A. clubs and bathing establishments. Protective goggles always should be worn while taking ultraviolet ray treatment or administering it to others.

CONCERNING diphtheria prevention and medical ethics, the Commissioner of Health for the State of New York says, "Until the medical profession is able to lay aside its cloak (of ethical reserve) and forget the attitude that they are soliciting trade from patients, the campaign will never be successful. It is up to the medical profession to have the children of their clientele immunized. The campaign will never succeed unless the doctors are willing to do their part in looking after their patients' children and have them immunized continually." Commenting editorially on this statement, one of the New York papers said, "The doctors who are supporting the diphtheria campaign are not soliciting trade when they urge parents to avail themselves of the protection which toxin-antitoxin affords their children. Everyone who knows the truth about this saver of lives is under moral obligation to pass the knowledge on to those who need it. Upon whom does this obligation rest more locally than the physician, the health mentor of the family?"

"Let us have no hesitation about urging this

health measure upon all with whom we come in contact. Which is the greater risk: the fear that we shall bear some childish accusation of commercialism, or the fear that the death of some innocent diphtheria victim will be on our conscience because we failed to do everything we could do to secure his protection."

To all of which we say, "Amen."

Emergency Surface Sutures. Mr. H. de P. B. Veale (honorary surgeon to the Ilkley Coronation Hospital) writes: I have devised, and Messrs. A. de St. Dalmas and Co., Ltd. (Leicester) have made for me, what may be described as "surface sutures" ("Surfasutes"). They are intended to do away largely with the necessity for using clips or a needle to suture lacerated wounds. The device consists of strips of specially adhesive plaster cut in various shapes and sizes, each furnished with small smooth eyelets. As shown in Fig. 1, after the laceration has been cleaned, sterilized, and dried, they are laid in interrupted position on each side of the wound, the eyelets being about half an inch distant from the cut edge. A sterile



FIG. 1.

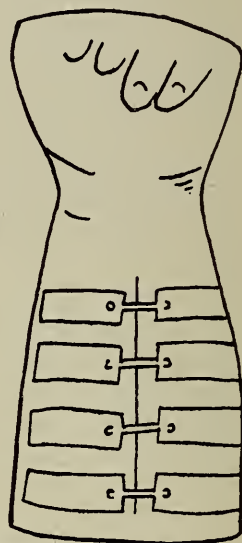


FIG. 2

curved needle and silk, or silkworm gut, is then passed through the eyelets instead of the skin, and the edges of the wound can be accurately approximated, as shown in Fig. 2.

There are many obvious advantages. The sterile surface sutures, needle, and silk or silkworm gut can be carried in the doctor's bag, and are always ready for immediate use. The pain of stitching is entirely done away with. No stitch scars are left, and there is no danger of stitch abscesses. Dressings can be changed without disturbing the surface sutures. The plaster strips are antiseptic and specially adhesive, and therefore cannot slip. The smooth surface of the eyelets is in contact with the skin, and therefore there is no chafing. The eyelets can be raised for the ready introduc-

tion of the sutures, because the adhesive surface does not run beyond them, but is enfolded to strengthen their insertion.

These sutures are obtainable from Mr. Chas. F. Thackray, Park Street, Leeds.—*British Medical Journal*, August 17, 1929.

THE Chicago Medical Society, including all of its fifteen branches, has voted unanimously to undertake the immunizing with toxin-antitoxin injections of all Chicago children not yet so inoculated, the number of which is thought to be about 500,000. Because of the cost of these immunizing injections, which by many is considered high, thousands of children fail to receive protection from diphtheria. It is therefore agreed that for the purpose of obviating this objection, all physicians in the city of Chicago will give these injections for one dollar each, the supply of toxin-antitoxin to be furnished by the Public Health Department. These injections are to be given Saturdays only for a period of three months, at hours designated by individual physicians of the city, and it is expected that all of the physicians of Chicago will support this anti-diphtheria drive in the hope that diphtheria may be driven out of the city. Each physician signs a card, giving his name, office address, and stating the hours on Saturday which he wishes to devote to this work during the three months period. The public will be informed through the lay press as to the physicians in any given neighborhood who are immunizing in accordance with the plan. It is felt that the benefit derived will be appreciable. The humanitarian factor, the new contacts established, and the increase in good will of the community far outbalances any other consideration. The diphtheria commission will undertake the financing and carrying out of an intensive city-wide educational campaign to induce parents and those in charge of children from one to ten years of age to take them to their physician for injections of toxin-antitoxin. Likewise the nursing staff of the department of health and all other cooperative agencies will refer all children with whom they come in contact to their family physicians. This means immunizing about 500,000 children. Such a campaign to eradicate diphtheria can be carried out by any city or for that matter by any state. The example set by Chicago physicians well may be followed by physicians in Indiana cities.

We are beginning to think that if our governor continues to pardon hardened criminals he ought to be treated for a mental disease. In fact, it must be some sort of a mental disorder that justifies the pardoning of criminals who have been incarcerated through due process of law and on the judgment of a jury supposed to have analyzed

carefully and conscientiously all the evidence. That several of the pardoned convicts have gone out and sinned again, finally being recommitted to penitentiaries, does not seem to alter the practice of our pardoning governor. Pardoning may be all right when there is evidence to the effect that there has been a miscarriage of justice, but to pardon a man on sentimental grounds alone, or with the idea of reforming the criminal, is bad in theory or practice, and the records to date seem to prove this assertion.

Another thing to which we object is the spoiling and petting of prisoners. For instance, the newspapers announced that on Thanksgiving day the murderers, hold-up men, thieves, and criminals of every description located in our state prison were treated to a perfectly wonderful turkey dinner, with all the frills, and the day wound up with a fine moving picture entertainment in the evening. Hundreds of poor but honest people in Indiana would have been very grateful had they received a sufficient supply of bread and butter and other plain articles of food to satisfy hunger on Thanksgiving day. The enemies of society had to be fed bounteously and extravagantly at state expense while honest citizens had to suffer. The most appropriate kind of prison reform is that which will establish impossibility of securing pardon except in the face of great doubt as to guiltiness of the criminal; good but plain food and plenty of it; manual labor and plenty of it, the proceeds of which latter could go to the state; and humane treatment on the part of the jailers. In recent years we have had altogether too many sob sisters trying to give our murderers and hold-up men coddling and petting that they do not deserve. It is high time that these jailbirds suffer the full penalty for their crimes.

SECRETARIES DEPARTMENT

Happy New Year! I am busy collecting dues. When I get this job done I will write about the meeting in Chicago. Hope everybody had a merry Christmas.

A. M. MITCHELL, M.D.

MEDICO LEGAL DEPARTMENT

By ALBERT STUMP

ATTORNEY FOR INDIANA STATE MEDICAL
ASSOCIATION

Question. What is the law in regard to collection agents who make collections and fail to turn over to creditors their proper share?

Answer. Our statutes defining criminal offenses make the failure of collectors to turn over to their employers the money collected, after deducting reasonable fees, the crime of embezzlement. Burns Indiana Statutes 1926, Section 2471, defining the

offense and providing the penalty, reads as follows:

"Any attorney-at-law, or person engaged in making collections for others, who, having the money or other thing of value in his possession, or under his control, received for his client or employer, shall fraudulently refuse to pay over or deliver the same to his client or employer, or the person or persons by them designated to receive the same, less the reasonable charges, fees or demands thereon, shall be deemed guilty of embezzlement, and, on conviction, shall be imprisoned in the state prison not less than two years nor more than fourteen years, fined not less than one dollar nor more than one thousand dollars, and disfranchised and rendered incapable of holding any office of trust or profit for any determinate period."

Under this statute it was held in *Fowler vs. Wallace*, 131 Ind. 347, that the felonious intent to deprive the employer of his money need not exist at the time the money was obtained, but that if the intent is formed at any time it gives a criminal character to the act and constitutes the crime of embezzlement. All these agencies that undertake to collect doctors' accounts and then refuse to pay over to the doctors their proper share of the collections, could be prosecuted under this statute. The information upon which the prosecution might be based should be presented to the prosecuting attorney of the county in which the crime was committed. He presents such information to the grand jury, whose duty it is to return an indictment, if the facts warrant.

If there was a scheme or device made before the collection of the money for the obtaining of it, then a prosecution might be had in the federal courts for using mails to promote fraud. Section 338 of Title 18, being on page 487 of the U. S. Code of 1926, defines this crime and provides the penalty. That section reads as follows:

"Whoever, having devised or intended to devise any scheme or artifice to defraud, or for obtaining money or property by means of false or fraudulent pretenses, representations, or promises, or to sell, dispose of, loan, exchange, alter, give away, distribute, supply, or furnish or procure for unlawful use any counterfeit or spurious coin, bank note, paper money, or any obligation or security of the United States, or of any State, Territory, municipality, company, corporation, or person, or anything represented to be or intimated or held out to be such counterfeit or spurious article, or any scheme or artifice to obtain money by or through correspondence, by what is commonly called the "sawdust swindle," or "counterfeit-money fraud," or by dealing or pretending to deal in what is commonly called "green articles," "green

coin," "green goods," "bills," "paper goods," "spurious treasury notes," "United States goods," "green cigars," or any other names or terms intended to be understood as relating to such counterfeit or spurious articles, shall, for the purpose of executing such scheme or artifice or attempting so to do, place, or cause to be placed, any letter, postal card, package, writing circular, pamphlet, or advertisement, whether addressed to any person residing within or outside the United States, in any post office, or station thereof, or street or other letter box of the United States, or authorized depository for mail matter, to be sent or delivered by the post office establishment of the United States, or shall take or receive any such therefrom, whether mailed within or without the United States, or shall knowingly cause to be delivered by mail according to the direction thereon, or at the place at which it is directed to be delivered by the person to whom it is addressed, any such letter, postal card, package, writing, circular, pamphlet, or advertisement, shall be fined not more than \$1,000, or imprisoned not more than five years, or both."

The information upon which federal prosecution might be based should be presented to the district attorney. He would cause that information to be brought before the federal grand jury.

It will be noted that under the federal statute the scheme or artifice for obtaining money fraudulently by the use of the mails must exist at the time the mails are being used. If that intent did not exist at the time, but was formed after the money had been obtained, then the federal statute would not be violated, but the state statute would. Proof of intent is usually made by evidence of continuing conduct.

DEATH NOTES

GEORGE M. ROBINSON, M.D., of Loogootee, aged eighty-two years, died December 15th. Dr. Robinson was a member of the Daviess-Martin County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

D. B. SMOOT, M.D., of Washington, died December 2, aged sixty-seven years. Dr. Smoot graduated from the Medical College of Indiana, Indianapolis, in 1862. He was a member of Kosciusko County Medical Society, the Indiana State Medical Association and the American Medical Association.

WILLIAM E. CAMP, M.D., of Clarksville, died November 2, aged fifty-eight years. Dr. Camp

graduated from the Medical College of Indiana, Indianapolis, in 1896. He was a member of the Hamilton County Medical Society, the Indiana State Medical Association and the American Medical Association.

JONATHAN C. HARDESTY, M.D., of Newcastle, died November 22, aged eighty years. Dr. Hardesty graduated from the Medical College of Indiana, Indianapolis, in 1880. He was a member of the Henry County Medical Society, the Indiana State Medical Association and the American Medical Association.

JOHN ELFERS, M.D., of Rising Sun, died December 2, 1929, of cerebral hemorrhage. Dr. Elfers was seventy-seven years of age. He graduated from Miami Medical College, Cincinnati, in 1878. He was a member of the Dearborn-Ohio County Medical Society, the Indiana State Medical Association and the American Medical Association.

JAMES R. BALL, M.D., of Lebanon, died December 25, at a hospital in Indianapolis. Death resulted from an infected scratch on his hand. Dr. Ball graduated from the Medical College of Indiana, Indianapolis, in 1891. He was a member of the Boone County Medical Society, the Indiana State Medical Association, and the American Medical Association.

GEORGE D. MARSHALL, M.D., of Kokomo, died December 20, aged fifty-seven years. Death was thought to be due to a heart attack from overexertion in trying to get his automobile out of a snowdrift. Dr. Marshall graduated from the Central College of P. and S., Indianapolis, in 1904. He was a member of the Howard County Medical Society, the Indiana State Medical Association, the American Medical Association and of the Clinical Orthopedic Society.

NEWS NOTES AND PERSONALS

DR. VICTOR C. VAUGHAN, noted scientist and former dean of the University of Michigan, died suddenly at Richmond, Virginia, November 21.

DR. HAROLD S. HATCH, of Indianapolis, presented a paper on "Diagnosis of Allergic Diseases" at the December third meeting of the Muncie Academy of Medicine.

THE Madison County Medical Society held its regular meeting December 17, at the Y. M. C. A., Anderson. A program was presented, following a turkey dinner. Officers were elected at the business session.

DR. DONALD BOWERS was elected president of

the Huntington County Medical Society at a meeting held December third. Dr. G. M. Nie was made vice-president, and Dr. R. G. Johnston, secretary-treasurer.

THE Indianapolis city council has appropriated \$875,000 for the erection of an out-patient building which will include research laboratories. The building is the second unit of a group of new buildings to be erected.

THE Daviess-Martin County Medical Society elected officers for 1930 at its regular meeting held December 10. Officers elected are as follows: President, B. O. Burress; vice-president, T. A. Hayes; secretary, T. F. Spink.

THIRTY members of the Woman's Auxiliary to the Vanderburgh County Medical Society met at the Y. W. C. A., Evansville, November 20th. Professor Cressy, of Evansville College, gave a very interesting talk on welfare work.

AT the December ninth meeting of the Randolph County Medical Society, Dr. F. A. Zeller, of Union City, was made president; Dr. C. E. Martin, of Lynn, vice-president; and Dr. W. S. Dininger, of Winchester, secretary-treasurer.

AT the meeting of the Northeastern Academy of Medicine, held December 5, the following officers were elected: President, C. E. Munk, Kendallville; vice-president, J. E. Rarick, Wolcottville, and secretary-treasurer, A. J. Hostetler, LaGrange.

AT a recent meeting of the Clinton County Medical Society, the following officers were elected to serve during 1930: Dr. A. G. Chittick, Frankfort, president; Dr. J. A. VanKirk, Frankfort, vice-president; Dr. I. E. Carlyle, Sedalia, secretary-treasurer.

DR. W. H. STONER, formerly director of the medical division professional service department of the E. R. Squibb and Sons, has joined the scientific department of Hoffmann-LaRoche, Inc., of Nutley, N. J., where he has assumed the duties of medical director.

DR. W. A. STAUFFER, of Elkhart, was made president of the Elkhart County Medical Society at its recent monthly meeting, December 5. Dr. G. E. Bowdoin, of Elkhart, was made vice-president and Dr. S. T. Miller, Elkhart, re-elected secretary-treasurer.

THE Noble County Medical Society held its annual meeting in Albion, December 19. Officers for 1930 were elected as follows: President, Dr.

J. D. Seybert, Kendallville; vice-president, Dr. J. E. Lucky, Wolf Lake, and secretary-treasurer, Dr. W. F. Carver, Albion.

DR. F. P. BUCHE was made president of the Wayne-Union County Medical Society at the annual meeting and banquet held December 12, at Richmond. Dr. E. C. Denny, of Milton, was made vice-president and Dr. Paul S. Johnson, of Richmond, secretary-treasurer.

THE Whitley County Medical Society held its regular monthly meeting December 10 and officers for the coming year were elected as follows: B. F. Pence, Columbia City, president; W. E. Wilkins, South Whitley, vice-president; O. F. Lehmberg, Columbia City, secretary-treasurer.

DR. AND MRS. FRANK E. WIEDEMANN, of Terre Haute, left the tenth of January to go to the Antipodes. They will visit Tahiti and Raratongo enroute, and after spending the remaining winter in New Zealand and Australia they will return by way of Fiji, Samoa and the Hawaiian Islands.

THE December third meeting of the Indianapolis Medical Society was a dinner meeting, with Dr. S. W. Harrington, of the Mayo Clinic, as guest speaker, his subject being "Diaphragmatic Hernia". Case reports were presented by Drs. E. B. Haggard, O. K. McKittrick and E. B. Mumford.

THE December seminar of the Indiana University School of Medicine was held in the Auditorium of the medical school building, December 13. Cases were presented by Drs. Edward Billings, Joseph Clevenger, G. Burch Mehlin, George Garceau, Earl Wiseman, J. H. Weatherby, G. W. Gustafson and Willis D. Gatch.

THE Northeastern Indiana Academy of Medicine held a meeting at the Gawthrop Hotel, Kendallville, December 5. Dr. Harry Mock, of Northwestern University Medical School, presented "Clinical Demonstrations with Lantern Slides of Reconstructive Surgery and of Injuries to the Intestines." This was the first of a series of lectures from Northwestern University Medical School.

GAMMA Chapter of Nu Sigma Phi, a national woman's medical fraternity, held its annual initiation and banquet at the Hotel Lincoln, Friday, December 13th. The initiates were Miss Olga Banke, Miss Mary Keller and Miss Exie Welch. Dr. Amelia Keller acted as toastmistress. Out of town guests were Dr. Margaret Telfer, Bloomington, Indiana, Dr. Nettie Powell, Dr. Eleanor McIlwaine and Dr. Frances Johnson, of Marion, Indiana.

MEMBERS of the family of Thomas Taggart, former United States Senator and several times mayor of Indianapolis, in his memory have made a gift to the Methodist Hospital in Indianapolis for construction of a solarium and children's floor in the new \$800,000 hospital unit. The announcement mentioned the sum of \$60,000 which the widow and heirs of Mr. Taggart have given to the Methodist Hospital trustees to be applied to construction of the children's floor that will be known as "The Thomas Taggart Memorial."

DR. J. A. McDONALD was elected president of the Indianapolis Medical Society at a meeting held December third. Dr. H. Joseph Barry was made first vice-president; Dr. Harry J. Weil, second vice-president, and Dr. Chester A. Stayton, re-elected secretary. Drs. J. W. Carmack and Harry L. Foreman were elected to the executive council, and the following were chosen as delegates to the state convention: Drs. A. F. Weyerbacher, R. C. Beeler, H. G. Hamer, Herman G. Morgan and Frank C. Walker. Dr. S. E. Earp was elected librarian.

AT the December third meeting of the Indianapolis Medical Society the following officers were elected for 1930: Dr. J. A. MacDonald, president; Dr. M. Joseph Barry, first vice-president; Dr. Harry J. Weil, second vice-president; Dr. Chester A. Stayton, secretary-treasurer; Dr. J. W. Carmack and Dr. Harry L. Foreman, councilors; Dr. Raymond C. Beeler, Dr. Walter F. Kelly, Dr. A. F. Weyerbacher, Dr. H. G. Hamer, Dr. Herman Morgan and Dr. Frank C. Walker, delegates; Dr. Murray N. Hadley, Dr. Karl L. Ruddell, Dr. C. H. McCaskey, Dr. Cleon A. Nafe, Dr. M. J. Spencer, and Dr. J. R. Lewis, alternate delegates, and Dr. S. E. Earp, librarian.

AT the Portland session of the American Medical Association last July, resolutions were passed endorsing the medical work of the Department of Commerce, its methods of physical examination and its method of selection of medical examiners, and urged that the same high standards be continued and offered the support of the American Medical Association in furthering the specialty of aviation medicine. All applicants for federal pilot licenses, either for flying or for training as pilots, must pass physical examinations before physicians designated by the Secretary of Commerce and they must be re-examined periodically. Examinations cover a rather detailed examination of the eyes, a brief examination of the ear, nose and throat, equilibrium, general physical examination and a detailed examination of the nervous system. There are now about seven hundred fifty medical examiners so designated throughout the country. All examinations are reviewed in Wash-

ington where the applicant is finally certified as qualified or disqualified for the grade for which he has applied.

In addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Curdolac Food Co.

Curdolac Soya Flour
Curdolac Casein-Bran Improved Flour
Curdolac Soya-Bran Flour
Curdolac Breakfast Cereal
Curdolac Casein Compound
Curdolac Wheat-Soya Flour
Curdolac Soya-Cereal Johnny Cake Flour
Curdolac Soya-Bran Breakfast Food.

Cutter Laboratory

Ampoule Solution Silver Nitrate, 1 per cent
Typhoid Paratyphoid Prophylactic hospital size package
Polyanærobic Antitoxin

De Pree Chemical Co.

Sulpharsphenamine-De Pree, 0.5 Gm. Ampules
Sulpharsphenamine-De Pree, 0.9 Gm. Ampules

H. K. Mulford Co.

Gelatin Compound Phenolized-Mulford
Diphtheria Toxoid-Mulford, 30 cc. vial
Erysipelas Streptococcus Antitoxin, Concentrated, 10 cc. syringe
Typho-Bacterin Mixed (Triple Vaccine TAB), thirty 1 cc. vial package
Typho-Serobacterin-Mulford (Sensitized Typhoid Vaccine), 3 syringe package
Normal Horse Serum without Preservative
Alder Pollen Extract-Mulford; Alfalfa Pollen Extract-Mulford; Annual Sage Pollen Extract-Mulford; Apple Pollen Extract-Mulford; Aster Pollen Extract-Mulford; Blue Beech Pollen Extract-Mulford; Boneset Pollen Extract-Mulford; Brown Grass Pollen Extract-Mulford; Burning Bush Pollen Extract-Mulford; Burweed Marsh Elder Pollen Extract-Mulford; Buttercup Pollen Extract-Mulford; California Mugwort Pollen Extract-Mulford; Careless Weed Pollen Extract-Mulford; Cedar Tree Pollen Extract-Mulford; Clover Pollen Extract-Mulford; Crab Grass Pollen Extract-Mulford; Dahlia Pollen Extract-Mulford; Dragon Sage Pollen Extract-Mulford; Elm Tree Pollen Extract-Mulford; English Plantain Pollen Extract-Mulford; Fescue Pollen Extract-Mulford; Golden Glow Pollen Extract-Mulford; Hickory Tree Pollen Extract-Mulford; Milo-Maize Pollen Extract-Mulford; Mock Orange Pollen Extract-Mulford; Oat

Pollen Extract-Mulford; Olive Pollen Extract-Mulford; Pecan Tree Pollen Extract-Mulford; Pine Tree Pollen Extract-Mulford; Poverty Weed Pollen Extract-Mulford; Prairie Grass Pollen Extract-Mulford; Privet Pollen Extract-Mulford; Quack Grass Pollen Extract-Mulford; Rabbit Brush Pollen Extract-Mulford; Rose Pollen Extract-Mulford; Salt Bush Pollen Extract-Mulford; Shad Scale Pollen Extract-Mulford; Sheep Sorrel Pollen Extract-Mulford; Slender Ragweed Pollen Extract-Mulford; Spring Amaranth Pollen Extract-Mulford; Sudan Grass Pollen Extract-Mulford; Velvet Grass Pollen Extract-Mulford; Western Giant Ragweed Pollen Extract-Mulford; Wheat Pollen Extract-Mulford; Wild Oats Pollen Extract-Mulford; Willow Tree Pollen Extract-Mulford; Winter Grass Pollen Extract-Mulford; Yellow Foxtail Grass Pollen Extract-Mulford.

National Drug Co.

Diphtheria Toxoid

Thompson's Malted Milk Co., Inc.

Thompson's Maltose and Dextrin.

INDIANA UNIVERSITY NEWS NOTES

A college aptitude examination will be part of the entrance requirements of Indiana University, if the recommendation of the committee on curriculum is adopted by the faculty. Under this plan an entering student must attain a "College Aptitude" rating of at least thirty-five. This rating will represent the average of two other ratings. One of the ratings will be on the student's scholastic standing among all the graduates of his own high school class. The other rating will be based on a standard psychological test. The curriculum revision committee, headed by Dr. H. H. Carter, has investigated similar entrance requirements at other institutions, particularly at the University of Minnesota. The results indicate that almost without exception a student who has failed in the "College Aptitude" examination and is admitted on condition fails to do satisfactory work and is soon eliminated. The "College Aptitude" examination proposed would show first by psychological tests whether or not the student possesses the necessary intelligence. It would show from his high school standing the other equally important asset, namely, his qualities of persistence at his studies. The aim is to make eliminations in the beginning which are practically certain to be made later and thus prevent waste of the state's money, waste of the student's time, and overcrowding of the university with unsatisfactory students to the exclusion of more worthy boys and girls who may seek admission.

PI LAMBDA Upsilon, honorary chemistry fraternity, will place on a bronze tablet the name of the male junior student in chemistry attaining the highest scholastic standing at the end of the second semester. The award will be made each year for the purpose of stimulating interest in high scholastic standards in chemistry.

MORE than ten thousand solutions for the cultivation of pollen of about seven hundred species of flowering plants have been studied by Dr. F. M. Andrews, of the botany department. Dr. Andrews' studies involve percentage of growth of pollen in different solutions from ordinary tap water through nine different solutions of sugar, the length of time it takes growth to begin, the length of life of the pollen, and the use of improved apparatus for making the studies. Dr. Andrews has received letters from many parts of the country inquiring about his study.

DEAN W. A. RAWLES, of the Indiana University school of commerce and finance, speaking before the Phi Beta Kappa society, reported encouraging progress toward the elevation of business into a real profession. He set out the qualifications of a profession as follows: adequate knowledge of the profession and proficiency in its practice, a purpose and willingness to use such knowledge primarily for the benefit of others, avowed allegiance to and compliance with the standards of conduct adopted by the profession, and interest in extension of the knowledge on which the profession is based.

FORTY Indiana University students are helping make their way through college, and at the same time are gaining valuable experience as assistants in the Indiana University library. In 1895, with 20,520 volumes, the library required three student assistants. On December 11, 1929, when Librarian W. A. Alexander made his report, the library had 209,637 volumes.

THE report from the university physician, Dr. J. E. P. Holland, shows that for November a total of six hundred ninety-two cases were treated. Of this number two hundred forty were men and four hundred fifty-two women. One hundred and thirty-eight conferences and one hundred fifty-five physical examinations were given. Colds led the list of ailments. Only one patient was cared for in the university contagious hospital during the month.

DEAN BURTON D. MYERS, of the Indiana University School of Medicine at Bloomington, has served notice through the columns of the campus newspaper that any student who wishes to be considered as an applicant for matriculation in

the Indiana University School of Medicine, or in any other medical school must make application on or before March 1, 1930.

"In the Indiana University School of Medicine at this time," says Dean Myers, "there are approximately thirty students fully accepted for matriculation in the fall of 1930, and eight or ten applications with credentials are on my table awaiting action.

"Apart from grades, the attitude of the student and the personal evaluation of the student by the instructors of pre-medical courses, is coming to count more and more for matriculation in all schools of medicine."

THE president and board of trustees of Indiana University have announced the establishment of a foundation for nutritional research at the Indiana University School of Dentistry, under the direction of Dr. Sherman L. Davis. For a number of years this school has been making a study of the causes and sources of dental diseases, pyorrhea and erosion, says Dean F. R. Henshaw. Believing that all these problems are associated closely with nutrition and that studies in this field will inevitably result in the betterment of the human family, the university has determined upon the foundation as the best means of making these studies. Dr. Davis received the A. B. and A. M. degrees from Indiana University and the Ph. D. degree from the University of Marburg. He joined the I. U. faculty in 1892 and became a member of the Dental School faculty shortly after it was added to Indiana University.

PROF. GEORGE W. STARR, director of the Indiana University bureau of business research, is making a survey of the retail drug business in Indiana. The survey is yet in progress. It covers about one fourth of the drug stores in Indiana, and is the first of its size and kind made in any state in the union. When completed the survey will show a complete summary of operations of drug stores in the state by size of towns and size of stores. The bureau also has in preparation a uniform accounting system for drug stores, something which has never been worked out before. The bureau's study of the drug business is one of seven special business problems under investigation this year.

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION THE COUNCIL

The regular mid-winter meeting of the Council of the Indiana State Medical Association was called to order by E. E. Padgett, of Indianapolis, temporary chairman, at 10:45 a. m., Thursday, December 19, at the Indianapolis Athletic Club, Indianapolis. The roll call showed the following present: Charles E. Gillespie, M.D., president, 1929; A. C. McDonald, president, 1930; A. B.

Graham, president-elect, 1931; William A. Doeppers, treasurer.

Members of the Council

First District—John H. Hare, Evansville.
 Second District—G. D. Scott, Sullivan.
 Third District—Walter Leach, New Albany.
 Fourth District—H. P. Graessle, Seymour.
 Fifth District—Not represented.
 Sixth District—B. G. Keeney, Shelbyville.
 Seventh District—E. E. Padgett, Indianapolis.
 Eighth District—M. A. Austin, Anderson.
 Ninth District—Not represented.
 Tenth District—Not represented.
 Eleventh District—Ira E. Perry, North Manchester.
 Twelfth District—H. O. Bruggeman, Fort Wayne.
 Thirteenth District—J. B. Rogers, Michigan City.
 Albert Stump, attorney for the Association.
 Thomas A. Hendricks, executive secretary.

Dr. Padgett complimented the members present upon the spirit which brought them to the meeting despite the fact that some of the roads of the state were impassable due to one of the worst snowstorms and blizzards in years, making it impossible for several of the councilors and many of the committee chairmen to be present.

Upon the motion of Dr. Scott, the reading of the minutes of the Council meetings during the annual session at Evansville last September was dispensed with as these were printed in the October number of THE JOURNAL and approved.

Reports of Councilors by Districts

Each councilor gave a short informal report of the conditions of medical organization in his district. In general these reports showed a prosperous condition in each district. All districts are holding regular annual meetings except the Eighth. Dr. Austin, councilor of the Eighth District, said that a multiplicity of county medical meetings were held in the district and hence no district meeting had been held during the last few years. On the other hand, Dr. Leach, councilor of the Third District, said that although the county society meetings in his district as a rule were not popular and very well attended, the district meetings were always conspicuous for their fine programs and big attendance. Dr. Rogers of the Thirteenth District and Dr. Austin of the Eighth spoke of the fine response received when moving pictures showing technical procedures of outstanding men are given.

Reports of Officers

Informal reports were given by Dr. Gillespie, retiring president, Dr. McDonald, president, 1930, and Dr. Graham, president-elect. Dr. William A. Doeppers gave the following treasurer's report:

INDIANA STATE MEDICAL ASSOCIATION APPLICATION OF FUNDS FOR THE YEAR ENDED DECEMBER 31, 1929.

| INCOME | |
|--|-------------|
| 2,733 Members Dues @ \$7.00..... | \$19,131.00 |
| Income from Exhibits..... | 2,345.00 |
| Interest on Certificates of Deposits and Bank Balances..... | 1,102.12 |
| Interest on Liberty Bonds..... | 212.50 |
| Interest on Realty Bonds..... | 155.00 |
| Total income for period..... | \$22,945.62 |
| EXPENDITURES | |
| Executive Secretary's Office..... | \$10,069.20 |
| Medical Defense..... | 965.25 |
| Publicity Committee..... | 438.68 |
| Public Policy..... | 383.71 |
| Journal..... | 5,466.00 |
| Other Committees..... | 154.77 |
| Council..... | 177.63 |
| Officers..... | 436.50 |
| Annual Session..... | 2,698.80 |
| Attorney..... | 300.00 |
| Total expenditures..... | \$21,090.54 |
| Net Income for 1929..... | 1,855.08 |

| | |
|-----------------------------------|-------------|
| Surplus at January 1, 1929..... | 26,181.94 |
| Surplus at December 31, 1929..... | \$28,037.02 |

ANALYSIS OF SURPLUS ACCOUNT AT DECEMBER 31, 1929

| | |
|---|-------------|
| Certificate of Deposit with Meyer-Kiser Bank..... | \$15,000.00 |
| Certificate of Deposit with Meyer-Kiser Bank..... | 3,000.00 |
| Checking Account Balance at Meyer-Kiser Bank..... | 25.87 |
| Petty Cash Account Balance in Bankers Trust Co..... | 11.15 |
| Liberty Bonds held in Safety Deposit Box..... | 5,000.00 |
| Real Estate Bonds in Safety Deposit Box..... | 5,000.00 |
| | \$28,037.02 |

The above statement shows the application of funds for the period from January 1, 1929, to December 31, 1929, as reflected by the books at that date.

R. E. WELCH, Auditor

WM. A. DOEPPERS, Treasurer.

COMPARATIVE STATEMENT OF INCOME AND EXPENSES FOR THE YEARS OF 1928 AND 1929

| | INCOME | | *Increase or Decrease |
|------------------------------------|-----------------------------|-----------------------------|-----------------------------|
| | Year Ended Dec. 31, 1928 | Year Ended Dec. 31, 1929 | |
| Dues..... | \$19,166.00 | \$19,131.00 | \$ 35.00 |
| Exhibits..... | 2,600.00 | 2,345.00 | 255.00 |
| Interest on Deposits..... | 1,468.10 | 1,102.12 | 365.98 |
| Interest on Liberty Bonds..... | 212.50 | 212.50 | — |
| Interest on Real Estate Bonds..... | — | 155.00 | *155.00 |
| Total Income..... | \$23,446.60 | \$22,945.62 | \$500.98 |
| | EXPENDITURES | | *Increase or Decrease |
| | Year Ended Dec. 31, 1928 | Year Ended Dec. 31, 1929 | |
| Executive Secretary's Office..... | \$10,798.68 | \$10,069.20 | \$729.48 |
| Medical Defense..... | 1,650.00 | 965.25 | 684.75 |
| Publicity Committee..... | 512.99 | 438.68 | 74.31 |
| Journal..... | 5,468.00 | 5,466.00 | 2.00 |
| Public Policy..... | 309.52 | 383.71 | *74.19 |
| Other Committees..... | 153.42 | 154.77 | *1.35 |
| Council..... | 227.20 | 177.63 | 49.57 |
| Officers..... | 217.50 | 436.50 | *219.00 |
| Annual Session..... | 2,242.61 | 2,698.80 | *456.19 |
| Attorney..... | 300.00 | 300.00 | — |
| Better Business Bureau..... | 200.00 | — | 200.00 |
| Total Expenditures..... | \$22,079.92 | \$21,090.54 | \$989.38 |
| NET INCOME..... | \$ 1,366.68 | \$ 1,855.08 | *\$488.40 |

Dr. Doeppers spoke of the fine financial condition of the Association. The treasurer was complimented and the report was accepted by the Council as read. Following the acceptance of this report Dr. Doeppers said that money might be saved upon badges insofar as \$130.00 was spent last year on badges. Following a discussion Dr. Rogers suggested permanent badges that would be worn each year by the physicians attending the meeting. Several doctors spoke of eliminating badges altogether, while Dr. Gillespie spoke favoring the use of identifying badges. No definite action was taken upon the discussion.

Special Action by the Council

The Council expressed its sympathy to Dr. MacDonald in his recent loss. The Council instructed the executive secretary to write a message to Albert E. Bulson, M.D., editor of THE JOURNAL, who is in the hospital, expressing the wish of that body for Dr. Bulson's early recovery and greetings for the season.

Questions Referred to the Council

The following two questions have been presented to the Executive Committee of the Indiana State Medical Association by William F. King, M.D., secretary of the Indiana State Board of Health and have been referred by the Executive Committee to the Council for consideration.

1. Should the State Association adopt standing orders for the public health nurses of the state?
2. Should the State Board of Health laboratory supply the Tuberculosis Association the names of positive cases of tuberculosis as found in the laboratory, in order that these cases may be referred back to the tuberculosis nurses in the home community of the case?

In the discussion that followed upon these two questions Dr. Bruggeman was of the opinion that the state association cannot regulate public health nurses but that this is a matter distinctly up to each county medical society. Dr. Hare spoke of the fact that the Vanderburgh County Medical Society had a committee to which all public health agencies and associations could bring their problems. In this way an understanding between the county society and the various public health nurses was maintained. Dr. MacDonald said that he thought the matter was distinctly one for the county societies and that it was up to each county society to draw up rules and regulations for the guidance of public health nurses. Dr. Rogers said that a tuberculosis clinic had been held recently in Michigan City in LaPorte county and that the people were asked to take their children to this clinic for examination. He said that he felt that the public should not be asked to attend these clinics but that the patient in each case should be brought to the clinic only by the family physician. Dr. Austin spoke of the fact that Dr. James H. Stygall, working for the state anti-tuberculosis society, comes to Madison county once a month. He said that the majority of patients that go to Dr. Stygall are those who ordinarily would not go to a physician in time to be helped if they had tuberculosis. He said that the physicians were glad to have Dr. Stygall's help and he felt sure that if the physicians in the various counties worked in cooperation with the physician representing the State Tuberculosis Society, a beneficial understanding could be developed between the local physicians and the physicians sent out by the tuberculosis society. Dr. Graessle said the Tuberculosis Association is trying to find some way to increase interest in wiping out tuberculosis in his county and he thought that the Tuberculosis Association had adopted the best available policy possible in asking the cooperation of the county medical society of which he is a member. Although the Tuberculosis Association adopted this policy of cooperation with the county medical society, "they didn't get very far." The medical society members were to bring patients to the tuberculosis clinic. The action of the Tuberculosis Association met with very little interest among the members of the medical society. The Tuberculosis Society in this particular case tried to make the clinic a county medical society matter and it was not successful, the fault being that of the physicians, according to Dr. Graessle.

Dr. Gillespie said that although his feelings in the matter may be out of tune with those of the other members of the Council, he felt that the State Board of Health should give the names of tuberculosis cases that had been reported to the State Board of Health to the Tuberculosis Association, if any good could be derived from the use of these names.

Albert Stump, attorney for the Association, said that under the statute creating the State Board of Health, the State Board could pass rules and regulations which could govern its actions in giving the names of tubercular cases to the Indiana Tuberculosis Association. According to Mr. Stump it was an ethical rather than a legal question.

Following this discussion Dr. Keeney made the motion that the Council uphold Dr. King in keeping the names of positive cases of tuberculosis confidential in his office and further that the Council should go on record with the statement that the various county societies rather than the State Association should adopt, where necessary, standing orders for public health nurses. Motion seconded and carried.

Advisory Committee for Woman's Auxiliary

The Executive Committee notified the Council that the Bureau of Publicity had been named to act as an advisory committee from the State Association for the Woman's Auxiliary. By action of the House of Delegates at the Evansville session provision was made for the

creation of an advisory committee of the Indiana State Medical Association to act with the Woman's Auxiliary. No provision, however, was made concerning the composition of this committee. The Executive Committee, acting in its administrative capacity at those times when the House of Delegates and the Council are not in session, named the Bureau of Publicity to act as the advisory committee from the State Association for the Woman's Auxiliary. Upon the motion of Dr. Rogers, seconded by Dr. Austin, the action of the Executive Committee received the approval of the Council.

Complaint Against Riley Hospital Bulletins

In answer to the complaint made by the Council against the Riley Hospital bulletins and certain actions of the Riley Hospital nurses, Dr. B. D. Myers, dean of the Indiana University School of Medicine at Bloomington, appeared upon invitation of the Council. Dr. Myers read the following report:

"To the Council of the Indiana State Medical Ass'n.

"My dear sirs:

"In the minutes of the Council as printed in THE JOURNAL for October, 1929, page 458, there is an item entitled 'Complaint Against the Riley Hospital Bulletin.' At a recent meeting of the Committee further complaints were made.

"Analyzing the whole situation, it seems clear that these complaints should be considered under three heads:

1. Complaints against the Riley management or administration.
2. Complaints of the Riley Hospital Bulletin.
3. Complaints relating to the University nurses who visit the counties.

"Before taking up a consideration of these complaints, let me make a clear statement of the attitude of the Riley Hospital Board as an aid to an understanding of the essentials of the situation.

"First of all, you should know it is generally recognized that the honor for the conception of a children's hospital as a memorial to Riley belongs to a member of the medical profession, the late Dr. Lafayette Page, up to the time of his death a member of the Executive Committee of the Riley Board. At a meeting called at his home, Dr. Page sold the idea to a group of leading business men who later became the leaders of the Riley Hospital Board. The Board also included Dr. Carl McCulloch.

"Before making a start toward securing funds for the construction of the Riley Hospital, a survey was made to determine the need of such a hospital. The survey showed there were approximately 10,000 crippled children in the state needing the facilities of a great children's hospital. The Committee saw in these children, citizens of Indiana, handicapped by remediable defects and they conceived the function of this projected hospital to be the relief of remediable defects and the cure of the sick dependent children of the entire state.

"A trip was made to those cities where the leading children's hospitals of America were located in order to ascertain how other places had made provision for sick and crippled children, and that information might be secured as to the character of the building and size of the building best adapted to local needs. The architect accompanied the Committee on this trip of investigation, and points of advantage or disadvantage were noted and discussed.

"Finally, the project was presented to the people of Indiana and campaigns for funds were launched in every county of the state. Moved by purely selfish motives, or by a great fear of state medicine, or by loyalty to a newly established or projected local hospital whose problems on a small scale were very like those of the Riley—some members of the medical profession not only failed to support this great humanitarian project, but actively opposed it.

"With this bit of history in mind, one can readily understand that when complaint is made of the Riley, to receive sympathetic consideration, the Riley Committee must be assured it is not the continued protest of those who would have prevented the construction of the Riley Hospital, could they have done so.

"The Riley Committee feel themselves pledged to the 30,000 citizens of Indiana who contributed to the Riley fund that this hospital shall render a great and needed service to the people of the whole state. They believe it of great civic importance that children growing into young manhood and womanhood shall enter upon the full duties of citizenship as little handicapped as possible by remediable defects or curable illness. They believe no individual or group of individuals can rightfully stand between the people and the service this hospital is prepared to render.

"The situation is relieved by the fact that many doctors did give their active support to this project of the Riley Hospital, so obviously for the benefit of the people of the state. I know communities in which a large part of the county subscription was secured by some doctor who carried Riley notes with him on his rounds.

"With this statement, necessary to an understanding of the whole problem, let us examine the complaints against the Riley.

1. The complaints against the management or administration of the hospital are two in number:

a. There is the complaint formally registered a year ago at the midwinter meeting of the Council, that patients were being accepted by the Riley who were not indigent. A year ago, and recently at the Executive Committee meeting. I replied that if this statement were true, the fault was that of the doctor and judge certifying the patient, and not the fault of the hospital. I believe any fair-minded person must accept this statement as valid, and I believe the leadership of the Indiana State Medical Association does so.

"But snapshot judgments like snapshot diagnoses are liable to error. So let us examine this complaint a bit. One doctor in support of his complaint made this statement to me. 'I know the child is not indigent for the father paid me \$150 for an operation three months ago.' Instead of proof of non-indigency, this may be the explanation of present indigency, if the \$150 was the total savings of the family.

"Here is a mother and daughter—the daughter a teacher. The mother, seriously ill, spent twenty-four weeks in a hospital. The total expense was \$1,500, which was the entire savings of the two people. The next time either is sick, the one sick will have to be a charity case.

"Here is a mother ill as a pay patient in one hospital, with her child in the Riley. Wrong! Wrong! Someone shouts. But the situation is one in which the family budget is such that either the mother or child must receive free care. Does it matter which is the charity patient?

"Here is a family (father, mother, a boy and a girl), self-supporting, independent. The father becomes ill and finally undergoes a mastoid operation. Wages stop for nine weeks, debts pile up. They live in two rooms, poorly clothed and undernourished, in constant fear of a possible further illness of some member of the family.

"It is not in the interests of society or the medical profession that because of illness, the future of a family should be mortgaged.

"The trouble here is that we have been going on the theory that indigency is a definitely definable state, whereas, in reality, indigency is a relative condition. Judges and socially minded doctors of medicine will give their interpretation to the term, and those in position to know all the facts are in the best position to judge what should be done. In consideration of the family, the facts are not given publicity. With part of the facts in mind, it is as illogical to jump to a conclusion as it

would be to jump to a diagnosis with only part of the symptoms of a case before one.

"There may be cases in which the doctor and judge err in favor of the patient. It is believed the number of such cases is not great. The hospital management must and does go on the theory that the doctor and judge are truthful, trustworthy people.

b. Another complaint against management of the hospital is that patients are sent to the hospital by physicians and that when discharged, the doctor is not notified nor is he called upon for such follow-up service as may be necessary. Instead of this, it is charged that the patient is sent home under the care of some social service worker and the doctor responsible for certifying the case is ignored.

"I replied to this complaint that, though I had not discussed the matter with Dr. Thompson, I was sure it was not the hospital policy, and that if there had been such a case, it was an oversight and Dr. Thompson would be more than ready to report cases back to the doctor sending them.

"I have since discussed this matter with Dr. Thompson, and he assures me that the policy is to report back to the doctor certifying the patient, but that for a short time, under pressure of too much work, the report back was delayed.

2. Complaint relating to the Riley Hospital Bulletins was found in the minutes of the Council, page 458. These complaints were repeated a few weeks ago in the meeting of the Executive Committee of the State Medical Association.

"I called attention to the fact that the character of the bulletin had already been changed under Dr. Thompson's oversight. The last bulletin was entirely acceptable to the Executive Committee and was one of the newsiest, most informing bulletins yet issued. I am very certain that the bulletin issued under the supervision of Dr. Thompson will tell more about the hospital than ever has been told, and tell it in a way that the medical profession will not merely accept it without criticism, but will positively like it.

3. Complaints relating to the nurses arise from the fact that these nurses operate, not at invitation of and in collaboration with the county medical society, but with the county or city nurse, the county superintendent of schools, or some other lay person or organization.

"The Riley Committee is willing to give the plan you propose, of having these nurses go into the counties on invitation of the county medical society, a trial.

"Recently, in reporting to the Riley Association, I concluded, as follows:

"Cooperation with the leadership of the State Medical Association can be secured, in my judgment, on the basis summarized below:

1. Reporting back to doctors who have committed a patient—when the patient is discharged.
2. A continuance of the medical bulletin under supervision of Dr. Thompson, giving not the 'sob story' of individual cases, but reports of matters of more general interest, written by a doctor of medicine for doctors of medicine, and as such, none the less interesting to the public.
3. And finally—by sending the University nurses into the counties on invitation of the County Medical Society.

"I trust I did not overstate the case, but that you will support me in this representation of the matter to that Committee, which while most deeply interested in the Riley, has none but best wishes for the personnel of the State Medical Association.

BURTON D. MYERS.

December 19, 1929."

Motion made by Dr. Keeney, seconded by Dr. Austin, that the Council accept the report of Dr. Myers and

call the matter a closed incident. Passed unanimously by the Council.

SUGGESTIONS AND PROPOSALS FOR THE 1930 MEETING AT FORT WAYNE

1. *Type of Program Desired.* Dr. Bruggeman spoke of the fact that Indiana should make a greater attempt to develop its local talent and that the best opportunity for developing this talent is at the State Association sessions. No definite action taken upon the question as to whether the program should be of out-state, local talent, or a mixed program. That will be left entirely to the Scientific Committee of the State Association.

2. *Recommendations Concerning Program.* The following recommendation of the Executive Committee concerning the scientific program was brought before the Council:

Thursday morning—General meeting as in the past.

Thursday afternoon—Section meetings.

Friday morning—General meeting with star program and three nationally known speakers.

This was suggested in order to do away with the poor attendance at the Friday morning section meetings where speakers of note too often talk to too few.

Both Dr. Rogers and Dr. Bruggeman expressed the desire that the social end of the convention and the golf tournament be deferred until Friday.

Dr. McDonald said that in his opinion there should be more general meetings than section meetings.

Dr. Graham said that Indiana is not developing the talent that is in the state and that we should have more papers from our own state men and encourage them to write better papers by giving them places on the program at the state association. He spoke in favor of having out-state guests speak at night.

Dr. Austin said that in his opinion the program would always undergo change and readjustment, and that it would be well to stress general programs one year, section programs the next year, and change about according to circumstances.

Dr. Rogers made a motion that all meetings be general and that golf be not considered. In the discussion that followed this motion, Dr. Gillespie spoke in favor of having a golf tournament on Friday morning. Dr. Leach spoke in favor of having some section meetings on the program. Dr. Rogers then amended his motion to read that all meetings at Fort Wayne be general meetings and that the golf tournament be held Friday morning. This motion seconded but lost on roll call. Dr. Hare then made the motion that the following scientific program be arranged for:

Wednesday, September 24, 2 p. m.—General meeting.

Thursday morning, September 25—Section meetings.

Thursday afternoon, September 25—General meeting.

Friday morning, September 26—Golf tournament.

This motion seconded and carried by unanimous vote.

With this program for the scientific meetings in vogue the general arrangement for the program of events will be somewhat as follows:

WEDNESDAY, SEPTEMBER 24, 1930

12 noon—Council luncheon.

2 p. m.—General scientific meeting.

6 p. m.—House of Delegates dinner meeting.

8:15 p.m.—Smoker, theater party or whatever local arrangements committee at Fort Wayne decides.

THURSDAY, SEPTEMBER 25, 1930

9 a. m.—Section meetings.

2 p. m.—General scientific meeting.

Evening—Banquet or public meeting as decided by local arrangements committee.

FRIDAY, SEPTEMBER 26, 1930

7 a. m.—Second meeting of House of Delegates, Council meeting immediately upon adjournment of House of Delegates.

9 a. m.—Golf tournament.

3. *Scientific Exhibit.* The Council moved to continue the scientific exhibit upon its present lines. Dr. Bruggeman pointed out that the scientific exhibit held in connection with a medical association session originated in Indiana and that Dr. Frank B. Wynn, the originator of the idea in Indiana, established the exhibit in the American Medical Association sessions, and for years acted as chairman of the Scientific Exhibit Committee of the A. M. A.

4. *Employment of Professional Medical Stenographers.* Upon the motion of Dr. Bruggeman, seconded by Dr. Keeney, the Council voted unanimously to employ competent, experienced medical stenographers for all scientific meetings.

5. *Preliminary Report Upon Arrangements for Fort Wayne Session 1930.*

To the Council and Officers of the Indiana State Medical Association Gentlemen:

Herewith is presented the preliminary report of arrangements for the Fort Wayne session of the Indiana State Medical Association, September 24, 25 and 26, 1930.

It is apparent that we cannot at this time give more than a resumé concerning our activities but we wish to inform you of our plans and to gain permission from the Council to carry out our program of arrangements.

1. *Convention Headquarters.*

The Anthony Hotel is suggested as convention headquarters.

2. *Hotels Available for Convention Guests.*

Hotels of Fort Wayne, number of rooms and rates are as follows:

| <i>Hotel</i> | <i>No. Rooms</i> | <i>Rates (Single)</i> |
|------------------------|------------------|-----------------------|
| Anthony Hotel | 320 (200 Baths) | \$2.00-\$6.00 |
| Baltes Hotel | 60 | 1.00- 3.50 |
| Cortland Hotel | 22 | 1.00- 2.00 |
| Hayes Hotel | 35 | 1.00- |
| Hotel Calhoun | 24 | 1.00- 2.00 |
| Hotel Centlivre | 60 | 1.25- 2.00 |
| Hotel Dowell | 34 | 1.00- |
| Hotel Indiana | 200 | 2.50- 4.50 |
| Hotel Keenan | 300 (300 Baths) | 2.00- 4.00 |
| Hotel Mack | 13 | 1.25- |
| Hotel Main | 24 | .75- 1.00 |
| Lake Shore Hotel | 34 | .50- |
| Lincoln Hotel | 22 | 1.00- 1.50 |
| Palace Hotel | 39 | 1.00- 1.50 |
| Randall Hotel | 95 | 1.00- 1.50 |
| Rich Hotel | 34 | 1.00- 1.50 |
| Vernon Hotel | 24 | 1.50- |
| Wayne Hotel | 102 | 1.25- 5.00 |
| Weber Hotel | 29 | .75- 1.50 |
| Kindler Hotel | 75 | 1.50- 3.00 |
| Hotel Allen | 60 | 1.50 up |

3. *Routes to Fort Wayne.*

Routes to Fort Wayne via numbered highways include State road No. 2 from South Bend, Elkhart, Goshen, etc.; U. S. No. 30 from Valparaiso, Plymouth, Warsaw, etc.; U. S. No. 24 from Huntington, Marion (State road No. 9), Anderson (State road No. 67), Indianapolis, etc.; State road No. 3 from Hartford City, Bluffton, etc.; U. S. No. 27 from Winchester, Richmond, Portland, Decatur, etc.; U. S. No. 30 from all cities east to Ohio line and U. S. No. 27 from Angola, Auburn, Garrett and all cities north.

Railroads leading into Fort Wayne are the Pennsylvania, Wabash, Nickel Plate, and New York Central; or in other words, all trunk line systems of the United States connect with Fort Wayne and two main lines (Pennsylvania and Nickel Plate.) Interurbans connect Fort Wayne with all cities, north, east or south of Fort Wayne, known as lines of the Indiana Service Corporation.

4. *Accommodations for Scientific Sessions and Scientific Exhibits.*

Rooms of the Hotel Anthony to be used for scientific exhibits are just off the mezzanine floor.

General meeting hall has a seating capacity of 500 persons. There will be no outside noise in this room and amplifiers are not necessary. A second room of 400 seating capacity is available in the hotel and a third large room, if needed, is available at the Chamber of Commerce.

5. *Accommodations for Clinics.*

Ample accommodations for clinics will be provided if desired.

6. *Accommodations for Lay Meeting.*

The Shrine auditorium is available for a public lay meeting at no cost to the society, provided the banquet is also held in this building, and with the understanding that a theater party instead of a smoker be given at which the society will buy a block of 800 seats. The auditorium seats 2,064 persons and regularly rents for \$300 to \$400 a night.

The manager of the Shrine has personally assured Mr. Schomp, convention manager of the Chamber of Commerce of Fort Wayne, that he will give the auditorium free for the lay meeting in accordance with the stipulations noted here. With this set-up it would be possible for the doctors to go direct to the lay meeting from the banquet, provided both are held on the same night, without leaving the Shrine building. The banquet can be carried to the usual conclusion for those who would rather attend the banquet than the lay meeting.

7. *Banquet.*

The banquet would be served to as many guests as desired up to a maximum of 2,000 at a price not under \$2.00 a plate.

8. *Commercial Exhibit.*

a. Commercial exhibit to be held on mezzanine floor of the Hotel Anthony.

b. There are local decorating firms who can set up exhibit booths and decorate them.

c. The hotel will supply a reasonable number of sample room tables and chairs for the exhibit booths at no charge.

d. Electric current is A. C. 110 volts, 60 cycle.

e. There is plenty of room for a registration desk.

9. *Lanterns.*

An adequate supply of lanterns is available.

10. *Registration.*

Registration will be handled by the convention bureau of the Chamber of Commerce supplying as many girls and typewriters as needed. Mr. Schomp will be in personal charge of this desk and ready to answer any question put by a delegate, member or visitor. A copy of the registration form accompanies this report. Information desk is included under this feature of arrangements.

11. *Information Desk.*

Chamber of Commerce will supply everything necessary.

12. *Types of Meetings Wanted by Local Society.*

It is probable that both general and sectional meetings will be provided for.

13. *Entertainment.*

The committee asks the privilege of working out the details of entertainment.

Convention bureau does not dictate type of entertainment convention shall have but advises that society seriously consider the theater party as a possibility. The Shrine auditorium is the finest of its kind in the country and with such fine facilities available in Fort Wayne the convention should surely make use of them.

Convention bureau will be glad to provide an historical tour of the city in large motor coaches for the ladies, a shopping tour, a trip through the Perfection Biscuit Company plant and facilities of the Fort Wayne

Women's Club, finest in the state, will be available for luncheons, breakfasts, etc., and the auditorium of the Women's club is offered for any meetings they may wish to have. This room seats 400 and is most lovely in decoration and lighting.

14. *Golf Tournament.*

Golf tournament would be played either at the Fort Wayne Country Club or the Elks Club. Both are 18-hole courses. Friday is suggested as the best day for the tournament as it will hold the members at the convention and on that day neither course will be crowded. Arrangements can be made for both men and women who desire to play golf.

15. *Names of Committee Members.*

The appointment of committees is going forward and will be completed in ample time.

The hotel, banquet or public meeting, golf, registration, entertainment and reception committees can receive valuable assistance from the Convention Bureau's office. Much of the detail work of these committees named here can be handled to good advantage through the Convention Bureau.

16. *Requests of General Chairman.*

In conclusion, the general chairman would request that he and his committee be privileged to arrange the details of entertainment, including for instance, substitution of the theater party for the smoker and the substitution of a public health meeting for the banquet.

I should like the privilege, if the committee deems it advisable, to create a separate section on obstetrics, in case on further inquiry, the success of such a section seems assured.

Respectfully submitted.

MILES F. PORTER, Sr., M.D.,

Chairman, Local Committee on

Arrangements for 1930 Convention

Assisted by

J. RAY SCHOMP, Manager,

Fort Wayne Chamber of Commerce

Convention Bureau

SURVEY OF ACCOMMODATIONS AT FORT WAYNE FOR ANNUAL SESSION

SEPTEMBER 24, 25 AND 26, 1930.

(1) Following the meeting of December 13 of the officers of the Fort Wayne Medical Society to arrange a preliminary report for the Council of the Indiana State Medical Association, A. C. McDonald, president of the Association, and your executive secretary were taken by J. Ray Schomp, manager, Convention Division, Chamber of Commerce of Fort Wayne, to visit the following buildings in view of surveying the facilities of each as the meeting place for the 1930 state convention:

(a) Shrine and Chamber of Commerce.

These two adjoining buildings form a fine place for convention headquarters providing the scientific program consists of general meetings. The large auditorium of the Shrine with its 2,000 seating capacity is more than ample for such general meetings, the only criticism being that the acoustics are said to be bad. This, of course, could be corrected by the installation of amplifying equipment. The foyer may be used to advantage for commercial exhibits and headquarters for registration.

The Chamber of Commerce with its very attractive convention facilities, especially for women, would be fine for auxiliary meetings, etc.

The disadvantage mentioned in connection with the use of the Shrine would be the expense of renting the building. There is no place in the Commercial Club suitable for housing commercial exhibits and the only place in the Shrine building where such exhibits could be suitably housed would be in the foyer provided that enough general meetings are to be held in the Shrine auditorium.

(b) *Catholic Community Center.*

This is another beautiful building with a convention hall adequate to take care of the general meetings and other rooms where section meetings could be conducted. There would be no place there suitable for either commercial or scientific exhibits.

(c) *Anthony Hotel.*

This place would have the advantage of practically housing and taking care of the daytime activities of the convention all under one roof. This being a fact, from the standpoint of the commercial exhibits it is probably more desirable than either of the other two locations for the annual session of the Association. In fact, from an exhibit standpoint it is ideal. The exhibits, both the scientific and commercial, and the registration desk could be arranged on the mezzanine floor directly in connection with an adequate hall for the general meetings. One section meeting could be held in a large sized room on the main floor of the hotel. The only drawback might be some noise from street traffic. Both of these rooms referred to are attractive. The use of these rooms and the mezzanine floor would cost us nothing. If the scientific exhibits are placed in rooms on the mezzanine floor we probably would have to pay just as was done at Evansville. If section meetings are decided upon at least one section probably would have to meet outside of the hotel.

(2) *Additional Comments.*

If the Shrine-Commercial Club group is selected as the meeting center, the House of Delegates' breakfast, which comes on Friday morning, September 26, could be served in one of the dining rooms of the Commercial Club or in the Shrine basement.

The first meeting of the House of Delegates could be held in the Shrine auditorium. If the meeting is held at the Anthony Hotel the first meeting of the House of Delegates could be held in the auditorium on the mezzanine floor, and the breakfast meeting of the House of Delegates could be held in one of the private dining rooms.

Irrespective of where the meetings during the day are to be held, the Shrine building or the Catholic Community Center is a fine place for a meeting for the lay public if such is decided upon. The Shrine Auditorium, on the one hand, has an advantage over the Catholic Community Center in that the Shrine Auditorium has a permanent seating arrangement, while folding chairs are used at the Catholic Community Center. On the other hand, the Catholic Community Center has a balcony which would increase its seating capacity to 2,500 while only 2,000 could be taken care of at the Shrine.

If the decision is reached to have both a banquet and a public meeting on Thursday evening, September 25, Mr. Schomp says that a banquet could be served in the basement of the Shrine and the public meeting could be held in the auditorium of the Shrine, the physicians holding their banquet and going to the public meeting afterwards. If a banquet were served at the Shrine, the Association, according to Mr. Schomp, would receive the Shrine auditorium free of charge except for lighting and janitor's services.

Mr. Schomp also said that for the Wednesday evening entertainment a musical comedy of some sort could be brought to Fort Wayne and given in the Shrine auditorium provided that the physicians guaranteed to take a block of 600 seats, and the rest could be sold to the public. If this were done it is my understanding that the Shrine Auditorium could be obtained free of charge on the following night for the public meeting.

A. C. McDONALD, President, 1930.

T. A. HENDRICKS, Executive Secretary.

The Council voiced its commendation upon Mr. Porter's splendid report.

Dr. Bruggeman said that in order of desirability probably the hotels available for convention guests at Fort Wayne could be rated as follows:

1. Hotel Keenan
2. Hotel Indiana
3. Hotel Anthony.

In regard to the request by the general chairman, Dr. Hare moved that the chairman, Dr. Miles Porter, Sr., and his committee be allowed to decide locally whether or not a theater party shall be substituted for a smoker, and a public meeting for the banquet. Motion carried.

The Council referred Dr. Porter's suggestion concerning the creation of a separate section on obstetrics to the Scientific Program Committee.

6. *Arrangements for Amplifier.* The local committee is to act as necessity demands.

*Membership Report by Districts*MEMBERSHIP REPORT
INDIANA STATE MEDICAL ASSOCIATION

December 31, 1929

| County Soc. | Dec.31 1929 | Dec.31 1928 | Loss Gain | Delin- quent | Mem- bers | New Re- moval | De- ceas- | Rein- state- ments |
|--------------------------|----------------|----------------|--------------|-----------------|--------------|------------------|--------------|--------------------------|
| First District: | | | | | | | | |
| Posey | 13 | 12 | 1 | 2 | 1 | | | |
| Vanderburgh | 99 | 95 | 4 | 6 | 5 | 4 | 6 | 2 |
| Warrick | 9 | 12 | -3 | 3 | | | 2 | |
| Spencer | 10 | 11 | -1 | 2 | | 1 | 1 | |
| Perry | 10 | 11 | -1 | 2 | 1 | 1 | 4 | 1 |
| Gibson | 22 | 21 | 1 | 4 | 2 | 1 | 1 | |
| Pike | 7 | 7 | | | | | 1 | |
| Total | 170 | 169 | 1 | 19 | 9 | 7 | 14 | 3 |
| Second District: | | | | | | | | |
| Knox | 33 | 32 | 1 | 11 | 1 | | 1 | 1 |
| Daviess-Martin | 24 | 26 | -2 | 3 | 1 | 2 | 1 | |
| Sullivan | 20 | 21 | -1 | | | 1 | 2 | |
| Greene | 13 | 15 | -2 | 4 | | 2 | 1 | |
| Owen | 8 | 8 | | 1 | 1 | | | 1 |
| Monroe | 24 | 25 | -1 | 2 | | 6 | 1 | |
| Total | 122 | 127 | -5 | 21 | 3 | 11 | 6 | 2 |
| Third District: | | | | | | | | |
| Lawrence | 24 | 23 | 1 | 2 | 2 | | 2 | |
| Orange | 17 | 16 | 1 | 4 | 1 | 2 | | |
| Crawford | 4 | 5 | -1 | 3 | | | | |
| Washington | 8 | 9 | -1 | 1 | | | | |
| Scott | 3 | 3 | | | | | 2 | |
| Clark | 17 | 17 | | 1 | 1 | 1 | 1 | |
| Floyd | 30 | 29 | 1 | 1 | 1 | 1 | | |
| Harrison | 6 | 6 | | 1 | | 2 | 1 | 1 |
| Dubois | 14 | 14 | | 2 | | | | |
| Total | 123 | 122 | 1 | 15 | 5 | 6 | 6 | 1 |
| Fourth District: | | | | | | | | |
| Brown | | | | | | | | |
| Bartholomew | 22 | 23 | -1 | 3 | | | 2 | |
| Decatur | 17 | 19 | -2 | 1 | | | | |
| Jackson | 19 | 19 | | | | | 1 | |
| Jennings | 10 | 10 | | | | 1 | | |
| Ripley | 11 | 11 | | 2 | 1 | 2 | | 1 |
| Jefferson | 18 | 20 | -2 | 1 | | 1 | 1 | |
| Switzerland | 7 | 7 | | | | | 1 | |
| Dearborn-Ohio | 20 | 18 | 2 | | 1 | | 4 | 1 |
| Total | 124 | 127 | -3 | 7 | 2 | 4 | 9 | 2 |
| Fifth District: | | | | | | | | |
| Parke-Vermillion | 15 | 12 | 3 | 7 | 2 | | 2 | 1 |
| Putnam | 15 | 16 | -1 | | | | | |
| Vigo | 120 | 117 | 3 | 4 | 3 | 7 | 4 | 3 |
| Clay | 16 | 15 | 1 | 4 | 2 | | 3 | 1 |
| Total | 166 | 160 | 6 | 15 | 7 | 7 | 9 | 5 |
| Sixth District: | | | | | | | | |
| Hancock | 16 | 16 | | 1 | | | 1 | |
| Henry | 27 | 30 | -3 | 6 | 1 | 2 | 4 | 1 |
| Wayne-Union | 48 | 53 | -5 | 6 | 1 | 5 | 1 | |
| Fayette | 12 | 12 | | 1 | | | 1 | |
| Rush | 20 | 22 | -2 | 1 | | 1 | | |
| Shelby | 20 | 20 | | 8 | 1 | | 1 | 3 |
| Franklin | 6 | 6 | | | | | 2 | |
| Total | 149 | 159 | -10 | 23 | 3 | 8 | 10 | 4 |
| Seventh District: | | | | | | | | |
| Hendricks | 17 | 16 | 1 | 1 | 1 | 3 | 1 | |
| Marion | 472 | 466 | 6 | 17 | 24 | | | |
| Morgan | 20 | 21 | -1 | 5 | 1 | | 2 | |
| Johnson | 10 | 12 | -2 | 6 | | | 1 | |
| Total | 519 | 515 | 4 | 29 | 26 | 3 | 4 | |

| | | | | | | | |
|----------------------|------|------|-----|-----|-----|-----|-----|
| Eighth District: | | | | | | | |
| Madison | 59 | 59 | 6 | 1 | 1 | 2 | 1 |
| Delaware-Blkford | 66 | 69 | -3 | 5 | 1 | 5 | 8 |
| Jay | 13 | 18 | -5 | 5 | | | 1 |
| Randolph | 23 | 24 | -1 | 1 | | | 1 |
| Total | 161 | 170 | -9 | 17 | 2 | 6 | 12 |
| Ninth District: | | | | | | | |
| Benton | 12 | 12 | | | | | |
| Fountain-Warren | 22 | 22 | | 1 | | 1 | |
| Tippecanoe | 72 | 68 | 4 | | 6 | 2 | 1 |
| Montgomery | 27 | 27 | | 4 | | 1 | 1 |
| Clinton | 22 | 21 | 1 | 2 | | 2 | 1 |
| Tipton | 9 | 10 | -1 | 2 | | 1 | 1 |
| Boone | 9 | 9 | | 7 | | 1 | 1 |
| Hamilton | 22 | 22 | | 2 | 1 | | 1 |
| White | 8 | 10 | -2 | 1 | | 2 | 1 |
| Total | 203 | 201 | 2 | 19 | 7 | 10 | 7 |
| Tenth District: | | | | | | | |
| Lake | 198 | 197 | 1 | 17 | 14 | 8 | 5 |
| Porter | 19 | 21 | -2 | | | 1 | 1 |
| Jasper-Newton | 18 | 18 | | 5 | | | 1 |
| Total | 235 | 236 | -1 | 26 | 14 | 9 | 6 |
| Eleventh District: | | | | | | | |
| Carroll | 20 | 21 | -1 | | | | 1 |
| Cass | 37 | 38 | -1 | 6 | 1 | | 2 |
| Miami | 24 | 22 | 2 | 3 | 1 | | 1 |
| Wabash | 27 | 29 | -2 | 1 | 1 | 3 | 2 |
| Huntington | 25 | 24 | 1 | | 1 | | 2 |
| Howard | 39 | 39 | | 1 | | | 7 |
| Grant | 42 | 40 | 2 | 2 | 1 | 3 | 1 |
| Total | 214 | 213 | 1 | 13 | 5 | 6 | 15 |
| Twelfth District: | | | | | | | |
| LaGrange | 14 | 13 | 1 | | 1 | 1 | 1 |
| Steuben | 13 | 12 | 1 | 1 | | 1 | |
| Noble | 24 | 23 | 1 | 1 | 1 | 1 | 1 |
| DeKalb | 21 | 21 | | 3 | | 2 | 3 |
| Whitley | 11 | 13 | -2 | 2 | | | 1 |
| Allen | 134 | 130 | 4 | 11 | 10 | 8 | 3 |
| Wells | 18 | 19 | -1 | | | 3 | 1 |
| Adams | 19 | 19 | | 1 | | | 1 |
| Total | 254 | 250 | 4 | 19 | 12 | 16 | 10 |
| Thirteenth District: | | | | | | | |
| LaPorte | 48 | 43 | 5 | 2 | 5 | | 1 |
| St. Joseph | 134 | 127 | 7 | 5 | 8 | 4 | 1 |
| Elkhart | 71 | 69 | 2 | | 1 | | 1 |
| Starke | | | | | | | |
| Pulaski | 4 | 8 | -4 | | | 5 | |
| Fulton | 18 | 19 | -1 | 2 | | | |
| Marshall | | | | | | | |
| Kosciusko | 18 | 20 | -2 | 1 | | | |
| Total | 293 | 286 | 7 | 10 | 14 | 9 | 3 |
| SUMMARY BY DISTRICTS | | | | | | | |
| First District | 170 | 169 | 1 | 19 | 9 | 7 | 14 |
| Second District | 122 | 127 | -5 | 21 | 3 | 11 | 6 |
| Third District | 123 | 122 | 1 | 15 | 5 | 6 | 6 |
| Fourth District | 124 | 127 | -3 | 7 | 2 | 4 | 9 |
| Fifth District | 166 | 160 | 6 | 15 | 7 | 7 | 9 |
| Sixth District | 149 | 159 | -10 | 23 | 3 | 8 | 10 |
| Seventh District | 519 | 515 | 4 | 29 | 26 | 3 | 4 |
| Eighth District | 161 | 170 | -9 | 17 | 2 | 6 | 12 |
| Ninth District | 203 | 201 | 2 | 19 | 7 | 10 | 7 |
| Tenth District | 235 | 236 | -1 | 26 | 14 | 9 | 6 |
| Eleventh District | 214 | 213 | 1 | 13 | 5 | 6 | 15 |
| Twelfth District | 254 | 250 | 4 | 19 | 12 | 16 | 10 |
| Thirteenth District | 293 | 286 | 7 | 10 | 14 | 9 | 3 |
| Total | 2733 | 2735 | -2 | 233 | 109 | 102 | 117 |

COMPARATIVE STATEMENT OF MEMBERSHIP DUES FOR YEARS OF 1928 AND 1929

| | No. of | Amt. of | No. of | Amt. of | Inc.* or Dec. |
|-----------------|--------|-----------|--------|-----------|---------------|
| | Memb's | Dues | Memb's | Dues | Memb's Dues |
| | 1928 | | 1929 | | |
| Adams | 19 | \$ 133.00 | 19 | \$ 133.00 | |
| Allen | 130 | 910.00 | 134 | 938.00 | *4 *\$28.00 |
| Bartholomew | 23 | 161.00 | 22 | 154.00 | 1 7.00 |
| Benton | 12 | 84.00 | 12 | 84.00 | |
| Boone | 9 | 63.00 | 9 | 63.00 | |
| Carroll | 21 | 147.00 | 20 | 140.00 | 1 7.00 |
| Cass | 38 | 266.00 | 37 | 259.00 | 1 7.00 |
| Clark | 17 | 119.00 | 17 | 119.00 | |
| Clay | 15 | 105.00 | 16 | 112.00 | *1 *7.00 |
| Crawford | 5 | 35.00 | 4 | 28.00 | 1 7.00 |
| Clinton | 21 | 147.00 | 22 | 154.00 | *1 *7.00 |
| Daviess-Martin | 26 | 182.00 | 24 | 168.00 | 2 14.00 |
| Dearborn-Ohio | 18 | 126.00 | 20 | 140.00 | *2 *14.00 |
| Decatur | 19 | 133.00 | 17 | 119.00 | 2 14.00 |
| DeKalb | 21 | 147.00 | 21 | 147.00 | |
| Delaware-Blkfrd | 69 | 483.00 | 66 | 462.00 | 3 21.00 |
| Dubois | 14 | 98.00 | 14 | 98.00 | |
| Elkhart | 69 | 483.00 | 71 | 497.00 | *2 *14.00 |

| | | | | | |
|-----------------|------|-------------|------|-------------|-----------|
| Fayette | 12 | 84.00 | 12 | 84.00 | |
| Floyd | 29 | 203.00 | 30 | 210.00 | *1 *7.00 |
| Fount'n-Warren | 22 | 154.00 | 22 | 154.00 | |
| Franklin | 6 | 42.00 | 6 | 42.00 | |
| Fulton | 19 | 133.00 | 18 | 126.00 | 1 7.00 |
| Gibson | 21 | 147.00 | 22 | 154.00 | *1 *7.00 |
| Grant | 40 | 280.00 | 42 | 294.00 | *2 *14.00 |
| Greene | 15 | 105.00 | 13 | 91.00 | 2 14.00 |
| Hamilton | 22 | 154.00 | 22 | 154.00 | |
| Hancock | 16 | 112.00 | 16 | 112.00 | |
| Harrison | 6 | 42.00 | 6 | 42.00 | |
| Hendricks | 16 | 112.00 | 17 | 119.00 | *1 *7.00 |
| Henry | 30 | 210.00 | 27 | 189.00 | 3 21.00 |
| Howard | 39 | 273.00 | 39 | 273.00 | |
| Huntington | 24 | 168.00 | 25 | 175.00 | *1 *7.00 |
| Jackson | 19 | 133.00 | 19 | 133.00 | |
| Jasper | 18 | 126.00 | 18 | 126.00 | |
| Jay | 18 | 126.00 | 13 | 91.00 | 5 35.00 |
| Jefferson | 20 | 140.00 | 18 | 126.00 | 2 14.00 |
| Jennings | 10 | 70.00 | 10 | 70.00 | |
| Johnson | 12 | 84.00 | 10 | 70.00 | 2 14.00 |
| Knox | 32 | 224.00 | 33 | 231.00 | *1 *7.00 |
| Kosciusko | 20 | 140.00 | 18 | 126.00 | 2 14.00 |
| LaGrange | 13 | 91.00 | 14 | 98.00 | *1 *7.00 |
| Lake | 200 | 1,400.00 | 198 | 1,386.00 | 2 14.00 |
| LaPorte | 43 | 301.00 | 48 | 336.00 | *5 *35.00 |
| Lawrence | 23 | 161.00 | 24 | 168.00 | *1 *7.00 |
| Madison | 59 | 413.00 | 59 | 413.00 | |
| Marion | 466 | 3,262.00 | 471 | 3,297.00 | *5 *35.00 |
| Miami | 22 | 154.00 | 24 | 168.00 | *2 *14.00 |
| Monroe | 25 | 175.00 | 24 | 168.00 | 1 7.00 |
| Montgomery | 27 | 189.00 | 27 | 189.00 | |
| Morgan | 21 | 147.00 | 20 | 140.00 | 1 7.00 |
| Noble | 23 | 161.00 | 24 | 168.00 | *1 *7.00 |
| Orange | 16 | 112.00 | 17 | 119.00 | *1 *7.00 |
| Owen | 8 | 56.00 | 8 | 56.00 | |
| Parke-Vermilion | 12 | 84.00 | 15 | 105.00 | *3 *21.00 |
| Perry | 11 | 77.00 | 10 | 70.00 | 1 7.00 |
| Pike | 7 | 49.00 | 7 | 49.00 | |
| Porter | 21 | 147.00 | 19 | 133.00 | 2 14.00 |
| Posey | 12 | 84.00 | 13 | 91.00 | *1 *7.00 |
| Pulaski | 8 | 56.00 | 4 | 28.00 | 4 28.00 |
| Putnam | 16 | 112.00 | 15 | 105.00 | 1 7.00 |
| Randolph | 24 | 168.00 | 23 | 161.00 | 1 7.00 |
| Ripley | 11 | 77.00 | 11 | 77.00 | |
| Rush | 22 | 154.00 | 20 | 140.00 | 2 14.00 |
| Scott | 3 | 21.00 | 3 | 21.00 | |
| Shelby | 20 | 140.00 | 20 | 140.00 | |
| Spencer | 11 | 77.00 | 10 | 70.00 | 1 7.00 |
| Steuben | 12 | 84.00 | 13 | 91.00 | *1 *7.00 |
| St. Joseph | 127 | 889.00 | 134 | 938.00 | *7 *49.00 |
| Sullivan | 21 | 147.00 | 20 | 140.00 | 1 7.00 |
| Switzerland | 7 | 49.00 | 7 | 49.00 | |
| Tippecanoe | 68 | 476.00 | 72 | 504.00 | *4 *28.00 |
| Tipton | 10 | 70.00 | 9 | 63.00 | 1 7.00 |
| Vanderburgh | 95 | 665.00 | 99 | 693.00 | *4 *28.00 |
| Vigo | 117 | 819.00 | 120 | 840.00 | *3 *21.00 |
| Wabash | 28 | 196.00 | 28 | 196.00 | |
| Warrick | 13 | 91.00 | 9 | 63.00 | 4 28.00 |
| Washington | 9 | 63.00 | 8 | 56.00 | 1 7.00 |
| Wayne-Union | 53 | 371.00 | 48 | 336.00 | 5 35.00 |
| Wells | 19 | 133.00 | 18 | 126.00 | 1 7.00 |
| White | 10 | 70.00 | 8 | 56.00 | 2 14.00 |
| Whitley | 13 | 91.00 | 11 | 77.00 | 2 14.00 |
| Totals | 2738 | \$19,166.00 | 2733 | \$19,131.00 | 5 \$35.00 |

POLITICAL AND LEGISLATIVE PROBLEMS

1. Question in regard to the rights of a physician in collecting a bill from the estate of a deceased patient. This question was discussed thoroughly by Mr. Stump, a detailed account of which may be found later in the Medico-Legal Department in THE JOURNAL.

2. Insanity inquest fees. A resolution was introduced at the meeting of the House of Delegates at Evansville asking that remedial legislation be introduced in the next General Assembly in order that a physician may receive more than \$3 a day for services actually rendered in insanity inquests. This question was referred to the attorney of the State Association, whose opinion was printed in the December number of THE JOURNAL. Mr. Stump expressed his opinion that in view of the rights that a physician already has in insanity inquests it seemed to him that there was not enough at stake to justify the efforts that would be necessary to change the present law. It is Mr. Stump's opinion that the fact that a physician obtained \$3 a day allowed him by the law from the county would not of itself prevent his obtaining pay for his professional services from those responsible for the allegedly insane, if the physician had made such a contract either expressed or implied.

Mr. Stump further brought out the fact that "The examining physician may refuse to serve under the appointment of a court unless he has been paid an adequate fee for his professional services as an expert witness."

3. *Special report of Legislative Committee upon State Board of Health laboratories.* The Council was informed that no action as yet has been taken upon the special report of the Legislative Committee made at the Evansville session, recommending that the private laboratories appoint a committee to meet with the State Board of Health and talk over the question of Wassermann tests. According to the recommendation of the Legislative Committee, which was adopted by the House of Delegates, this group, composed of representatives of the private laboratories and representatives of the State Board of Health, was to meet and to report back to the state Legislative Committee its findings. The state Legislative Committee in turn was to report back to the House of Delegates at the Fort Wayne session in September, 1930. Dr. William F. King, of the State Board of Health, who attended the luncheon of the Council, said that no official action had been taken yet upon this question, and that there had been no meeting between representatives of the private laboratories and representatives of the State Board of Health.

COUNTY SOCIETY ACTIVITIES

1. *Suggestions for county society programs.* At several times during the Council meeting mention was made of the popularity of medical films on county society programs. Dr. William N. Wishard, chairman of the Bureau of Publicity, at the Council luncheon mentioned the fact that the Bureau of Publicity always was prepared to supply speakers when asked by the various county societies.

2. No county societies exist in Brown, Marshall and Starke counties. Dr. McDonald spoke of the plan that was being considered to consolidate Marshall Starke and Kosciusko counties into an organization which could carry on post-graduate work.

3. Dr. Hare spoke of the arrangement that formerly existed in Cass county for handling charity work. He said that details of that work could be gotten from the Cass County Society secretary, if it is still carried on. The secretary was instructed to obtain these details and make a report upon work being done in Cass county at the next meeting of the Council.

ANNUAL SESSION OF AMERICAN MEDICAL ASSOCIATION AT DETROIT, JUNE 23-27, 1930

The question, "Do you think it would be well to try to get up a special train for Indiana physicians?" received the answer of "No" from the Council. The executive secretary was instructed to attend this session.

The meeting continued at luncheon which was held at the Indianapolis Athletic Club.

REPORTS OF STANDING COMMITTEES

Reports were made by the chairmen of the various standing committees of the State Association at the Council luncheon.

In addition to these reports Dr. William F. King, secretary of the State Board of Health, made a short talk.

The report of Dr. Stygall suggesting certain anti-diphtheria posters was referred to the Executive Committee for action. It was suggested that Dr. Stygall be asked to attend the January meeting of the Executive Committee in order to place his plans before that body.

Upon the recommendation of the Executive Committee the salary of the executive secretary was increased \$1,000 a year, starting January 1, 1930.

PROBLEMS OF STATE BOARD OF MEDICAL REGISTRATION AND EXAMINATION

1. *Successor for Dr. E. M. Shanklin.* The Council expressed its appreciation for the faithful service performed by Dr. E. M. Shanklin, of Hammond, both as

a member and secretary of the Indiana State Board of Medical Registration and Examination, and expressed regret that Dr. Shanklin was resigning from the Board. Report was made concerning Dr. Shanklin's likely successor and encouraging and pleasant interviews upon State Board matters with Governor Leslie.

2. *Funds for Investigation Work of Board.*

The following letter was received from William R. Davidson, M.D., present secretary of the State Board of Medical Registration and Examination:

"I thank you for your invitation to attend the meeting of the Council of the State Medical Association, and greatly regret that I cannot attend. It would be like old times to be there.

"The State Board of Medical Registration has available a small fund which may be used for the purpose of investigating the ways of violators of the medical practice act. Obviously, it cannot do this on a large scale yet, but as time goes on and the value of this is shown, it is very possible that the legislature may allow a larger fund.

"The Board would be glad to have the names of gross violators of the law given it. Needless to say, it must have the names of witnesses who will appear in court. The Board cannot go into court on hearsay; it must be able to prove any statement as must any other complainant. The Board now has the names of men who are persistently and openly violating the law and cannot prosecute because of lack of witnesses. Complaints are very easily and readily made, but all prosecutions must be made in a legal way, and that is not always an easy matter. Personalities, spite and jealousy cannot inspire any cause of action, for the animals may be shown and the case promptly be dismissed.

"Please give greetings to all the members of the Council."

QUESTIONS IN REGARD TO COMPENSATION LAW

The following communication from Dr. Crockett, chairman of the standing Committee on Civic and Industrial Relations, was read:

"I have had an interesting question come up on my Committee of Industrial and Civic Relations. It seems that some farmers have formed a partnership and bought a threshing outfit. It was not incorporated. The law requires such a threshing ring to take out compensation insurance under the Indiana Compensation Law. The members of this threshing ring then proceeded to act as employees, receiving pay at certain rates per day for whatever time they put in helping each other thresh. One of the members of the threshing ring who was so employed by the threshing ring, sustained an injury while at work calling for the attention of a doctor. On passing in the usual compensation forms, the insurance adjuster finally gave the opinion that the injured man was not an employee but was an employer and hence, not compensable under the policy.

"If this is true, it makes a peculiar situation in that the law is supposed to compel a carriage of compensation insurance in a situation where no one could be injured to take the benefit of it, if the interpretation of the adjuster is correct.

"Please advise me where I might go to get some information on this point."

Dr. Perry said that several cases of that sort had arisen in his experience and the insurance company had always paid.

THE COMMONWEALTH FUND COMMUNICATION

A letter telling of the establishment of The Commonwealth Fund in Indiana was read to the Council along

with the following letter from Olin West, M.D., secretary of the American Medical Association:

"I have your letter of December 13 concerning the Commonwealth Fund of New York.

"That organization was established, as I understand it, through the beneficence of the Harkness family and has at its command several million dollars, the income of which has been spent in various ways. Much of the work of the Fund has dealt in some manner with public health.

"The executive officer of that Fund is Mr. Barry Smith. Mr. Smith has attended the Conferences on Public Health which have been held here under the auspices of the American Medical Association and his views as expressed in discussions on the floor of those Conferences and in at least one paper that he contributed to a program of a Conference have led me to believe that the views of the officers of the Commonwealth Fund with respect to the conduct of public health activities are much more sound than are those entertained by any of the other great funds with the possible exception of the International Health Board of the Rockefeller Foundation.

"The Commonwealth Fund, according to my information, has financed several movements that have been conducted in various sections of the United States, some of which were originally called child health demonstrations. I think in the early days of this work some rather serious mistakes were made but I get the impression that these have been corrected and that the movements in which that Fund is now participating are conducted in a manner that enlists and maintains the cordial co-operation of physicians in the communities in which the work is being done. I happen to know that the Commonwealth Fund financed to a large extent the county hospital in Rutherford county, Tennessee. The physicians of the county have been enthusiastically behind this movement and the Commonwealth Fund has made it possible for members of the profession in the county to go away for postgraduate instruction without sustaining financial losses to themselves. The idea of this Fund seems to be that the community physicians should be helped to equip themselves to provide a well rounded service for the people of their county.

"Mr. Smith in his discussions here has always taken the position that the practicing physician is the most important element in any health program and that the organized medical profession in any community should be consulted before any activities affecting public health are begun.

"I am sending you a reprint in which you will find the paper presented by Mr. Smith at the Conference on Public Health held last March.

"Please understand that this letter reflects nothing more than my personal impressions and opinions."

Dr. Graessle reported that a nurse who is now working in the Child Hygiene Department of the State Board of Health formerly had done work for the Commonwealth Fund. He suggested that the executive secretary interview her in order to get first-hand information concerning the work that was done by the Commonwealth Fund.

ILLEGALITY OF ACTION GIVING STATE BOARD OF HEALTH REPRESENTATION IN HOUSE OF DELEGATES

The attention of the Council was called to the fact that in accordance with the opinion of Albert Stump, attorney for the Association, the action of the House of Delegates giving the State Board of health representation in the House of Delegates was illegal. The illegality of the action of the House of Delegates was noted by Dr. Bulson, editor of *THE JOURNAL*. Mr. Stump's comment upon the action follows:

"I have, at the request of your Executive Secretary, examined that part of the minutes of the first meeting of the House of Delegates at the 1929 session, which have to do with the attempted amendment to the by-laws admitting a member of the State Board of Health to the House of Delegates.

"In connection with the examination of that part of the minutes of the session I also studied the Constitution of the Association, and the By-Laws.

"From such examination and study of the minutes, the Constitution and the By-Laws, it is my opinion that the action of the House of Delegates was not effective to accomplish the amendment of the By-Laws so that a member of the State Board of Health could be admitted to the House of Delegates. The 'Editorial Notes' commenting on the situation presents the reasons for the conclusion I have reached as clearly as I could do. The Constitution can be amended only in the manner provided in the Constitution. That is, by presenting in open meeting at an annual session the proposed amendment, then publishing it twice during the ensuing year in *THE JOURNAL*, and then the House of Delegates adopting the proposed amendment by a two-thirds vote of the delegates present at the annual session following that annual session in which the proposed amendment had been presented in open meeting. The Constitution itself provides who can be delegates.

"The By-Laws can be amended only in the manner provided in the By-Laws. That is by a majority vote of all the delegates present at any annual session after the proposed amendment has lain on the table for one day. The scope of the By-Laws cannot be enlarged to change the Constitution. The By-Laws are effective only as to matters, consistent with the Constitution, concerning which the Constitution has not made provision.

"I would suggest that the purpose sought to be achieved by the attempted amendment, enlarging the qualifications for membership in the House of Delegates, might be achieved by permitting some member of the State Board of Health to attend and participate in discussions in the meetings of the House of Delegates, but not to have any right to vote. If this suggestion should meet with your approval the plan might be followed as a temporary expedient until the Constitution could be amended in the regular constitutional manner."

It was pointed out in the discussion that the criticism of the action of the House of Delegates was brought about through no animus toward the State Board of Health, and the matter was brought up merely to make sure that the business of the Association always shall be carried on in accordance with its constitution. It was suggested that Albert Stump, the attorney for the Association, draw up the amendment to the Constitution in the necessary form and make sure that it is presented by Dr. Bulson at the next meeting of the House of Delegates.

ELECTIONS FOR 1930

Dr. David Ross and Dr. William H. Kennedy were re-elected unanimously as members of the Executive Committee for 1930.

Dr. E. E. Padgett, of Indianapolis, temporary chairman of the Council, was elected permanent chairman of the Council for 1930.

Dr. Padgett announced that he would appoint the new Liaison Committee for 1930 at a later date. This Liaison or Contact Committee is to act informally for the State Association when called upon by state or government officials.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole December 18, 1930.

THOMAS A. HENDRICKS,
Executive Secretary.

STATEMENT OF INCOME AND EXPENSES FOR 1929
AS COMPARED WITH THE BUDGET

| INCOME | | | | | |
|-------------------------------------|------------------|------------------|-------------------------|--|--|
| | Budget Figure | Actual Income | Increase or Decrease | Requested by Committees for 1930 | Allowed by Budget Comm. for 1930 |
| Dues | \$19,000.00 | \$19,131.00 | \$ 131.00 | ----- | \$19,000.00 |
| Exhibits | 2,500.00 | 2,345.00 | 155.00 | ----- | 2,500.00 |
| Interest on Deposits | 1,200.00 | 1,102.12 | 97.88 | ----- | 1,000.00 |
| Interest on Liberty Bonds | 212.50 | 212.50 | ----- | ----- | 212.50 |
| Interest on Realty Bonds | ----- | 155.00 | 155.00 | ----- | 175.00 |
| Total Income | \$22,912.50 | \$22,945.62 | \$ 33.12 | ----- | \$22,887.50 |
| EXPENDITURES | | | | | |
| | Budget Figure | Actual Income | Increase or Decrease | Requested by Committees For 1930 | Allowed by Budget Comm. For 1930 |
| Executive Secretary's Office: | | | | | |
| Secretary's Salary | \$ 6,000.00 | \$ 6,000.00 | ----- | ----- | \$ 7,000.00 |
| Stenographers' Salaries | 3,042.00 | 3,035.00 | 7.00 | ----- | 3,276.00 |
| Office Rent | 350.00 | 12.00 | 338.00 | ----- | 350.00 |
| Lights | 350.00 | 11.00 | 339.00 | ----- | 50.00 |
| Towel Service | 19.20 | 19.20 | ----- | ----- | 19.20 |
| Telephone | 175.00 | 163.96 | 11.04 | ----- | 200.00 |
| Office Supplies | 300.00 | 142.01 | 157.99 | ----- | 200.00 |
| Postage | 300.00 | 219.33 | 80.67 | ----- | 300.00 |
| Stationery and printing | 250.00 | 114.14 | 135.86 | ----- | 250.00 |
| Telegraph and Telephone Tolls | 75.00 | 48.65 | 26.35 | ----- | 60.00 |
| Traveling Expenses and Misc. | 300.00 | 303.91 | 3.91 | ----- | 175.00 |
| Total | \$11,161.20 | \$10,069.20 | \$1,092.00 | ----- | \$11,880.20 |
| MEDICAL DEFENSE | | | | | |
| Attorneys' Fees | \$ 2,200.00 | \$ 965.25 | \$1,234.75 | \$1,000.00 | \$ 2,032.50 |
| PUBLICITY COMMITTEE | | | | | |
| Clipping Service | \$ 100.00 | \$ 80.31 | \$ 19.69 | \$ 100.00 | \$ 100.00 |
| Stationery | 100.00 | 144.97 | 44.97 | 100.00 | 100.00 |
| Postage | 100.00 | 157.20 | 57.20 | 100.00 | 100.00 |
| Traveling Expenses | 100.00 | 45.91 | 54.09 | 100.00 | 100.00 |
| Printing | 100.00 | ----- | 100.00 | 100.00 | 100.00 |
| Miscellaneous | 50.00 | 10.29 | 39.71 | 50.00 | 50.00 |
| Total | \$ 550.00 | \$ 438.68 | \$ 111.32 | \$ 550.00 | \$ 550.00 |
| PUBLIC POLICY | | | | | |
| Traveling Expenses | \$ 100.00 | \$ 45.00 | \$ 55.00 | ----- | ----- |
| Postage | 25.00 | 12.00 | 13.00 | ----- | ----- |
| Printing | 25.00 | ----- | 25.00 | ----- | ----- |
| Entertainment | 350.00 | 323.51 | 26.49 | ----- | ----- |
| Telegraph and Telephone | ----- | ----- | ----- | ----- | ----- |
| Miscellaneous | ----- | 3.20 | 3.20 | ----- | ----- |
| Total | \$ 500.00 | \$ 383.71 | \$ 116.29 | \$ 100.00 | \$ 100.00 |
| JOURNAL | | | | | |
| Subscriptions | \$ 5,500.00 | \$ 5,466.00 | \$ 34.00 | ----- | \$ 5,420.00 |
| OTHER COMMITTEES | | | | | |
| Stationery | \$ 25.00 | \$ 4.65 | \$ 20.35 | ----- | ----- |
| Medical Education | 100.00 | 38.76 | 61.24 | 100.00 | ----- |
| Scientific Com: Speakers | 100.00 | 3.20 | 96.80 | ----- | ----- |
| Industrial | 50.00 | ----- | 50.00 | 50.00 | 50.00 |
| Secretaries' Conference | 100.00 | 108.16 | 8.16 | 1,000.00 | 1,000.00 |
| Total | \$ 375.00 | \$ 154.77 | \$ 220.23 | ----- | \$ 1,050.00 |
| COUNCIL | | | | | |
| Traveling Expenses | \$ 150.00 | \$ 131.63 | \$ 18.37 | ----- | ----- |
| Expense of Meetings | 100.00 | 46.00 | 54.00 | ----- | ----- |
| Total | \$ 250.00 | \$ 177.63 | \$ 72.37 | ----- | \$ 200.00 |

OFFICERS

| | | | | | |
|---------------------------|-----------|-----------|-----------|-------|-----------|
| Treasurer's Office | | \$ 2.50 | \$ 2.50 | ----- | |
| Auditing | 225.00 | 375.00 | 150.00 | ----- | 150.00 |
| Bond and Safety Box | 50.0 | 59.00 | 9.00 | ----- | 59.00 |
| Total | \$ 275.00 | \$ 436.50 | \$ 161.50 | ----- | \$ 209.00 |

ANNUAL SESSION

| | | | | | |
|------------------------------------|-------------|-------------|------------|-------|-------------|
| Entertainment | \$ 500.00 | \$ 530.00 | \$ 30.00 | ----- | \$ 500.00 |
| Booths and Signs | 850.00 | 790.19 | 59.81 | ----- | 800.00 |
| Programs and Printing | 125.00 | 148.09 | 23.09 | ----- | 150.00 |
| Reporters | 300.00 | ----- | 300.00 | ----- | 450.00 |
| Badges | 150.00 | 131.53 | 18.47 | ----- | 135.00 |
| Speakers | 275.00 | 673.06 | 398.06 | ----- | 300.00 |
| Exhibit Circulars | ----- | 69.50 | 69.50 | ----- | 70.00 |
| Trav. Exp. Ex. Sec'y. Office | ----- | 135.05 | 135.05 | ----- | 135.00 |
| House of Delegates Breakfast | ----- | 125.00 | 125.00 | ----- | 125.00 |
| Miscellaneous | 200.00 | 96.38 | 103.62 | ----- | 100.00 |
| Total | \$ 2,400.00 | \$ 2,698.80 | \$ 298.80 | ----- | \$ 2,765.00 |
| Attorney | \$ 300.00 | \$ 300.00 | ----- | ----- | \$ 400.00 |
| Grand Total | \$23,511.20 | \$21,090.54 | \$2,420.66 | ----- | \$24,606.70 |

RECAPITULATION

INCOME

| | | | | | |
|-----------------------------|-------------|-------------|-----------|-------|-------------|
| Dues | \$19,000.00 | \$19,131.00 | \$ 131.00 | ----- | \$19,000.00 |
| Exhibits | 2,500.00 | 2,345.00 | 155.00 | ----- | 2,500.00 |
| Interest on Deposit | 1,200.00 | 1,102.12 | 97.88 | ----- | 1,000.00 |
| Int. on Liberty Bonds | 212.50 | 212.50 | ----- | ----- | 212.50 |
| Int. on Realty Bonds | ----- | 155.00 | 155.00 | ----- | 175.00 |
| Total Income | \$22,912.50 | \$22,945.62 | \$ 33.12 | ----- | \$22,887.50 |

EXPENDITURES

| | | | | | |
|-------------------------------|-------------|-------------|------------|-------|-------------|
| Executive Sec'y. Office | \$11,161.20 | \$10,069.20 | \$1,092.00 | ----- | \$11,880.20 |
| Medical Defense | 2,200.00 | 965.25 | 1,234.75 | ----- | 2,032.50 |
| Publicity Committee | 550.00 | 438.68 | 111.32 | ----- | 550.00 |
| Public Policy | 500.00 | 383.71 | 116.29 | ----- | 100.00 |
| Journal | 5,500.00 | 5,466.00 | 34.00 | ----- | 5,420.00 |
| Other Committees | 375.00 | 154.77 | 220.23 | ----- | 1,050.00 |
| Council | 250.00 | 177.63 | 72.37 | ----- | 200.00 |
| Officers | 275.00 | 436.50 | 161.50 | ----- | 209.00 |
| Annual Session | 2,400.00 | 2,698.80 | 298.80 | ----- | 2,765.00 |
| Attorney | 300.00 | 300.00 | ----- | ----- | 400.00 |
| Total | \$23,511.20 | \$21,090.54 | \$2,420.66 | ----- | \$24,606.70 |

BUREAU OF PUBLICITY

November 22, 1929.

Meeting called to order at 3:30 p. m.

Present: Wm. N. Wishard, M.D., Chairman; J. A. MacDonald, M.D., by proxy, and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held November 1 read and approved.

No action was taken on the release for publication November 30th, entitled, "Where Do You Sleep?" The secretary was instructed to refer this release directly to the other two members of the Publicity Committee.

The following requests for speakers were received:

December 2—Rush County Medical Association, Rushville, Ind. Speaker to be obtained.

December 3—Rotary Club, Kokomo, Indiana. "Periodic Health Examination." Speaker to be obtained.

The following report of medical meeting was received:

October 30—Grant County Medical Society, Marion, Ind. "Orthopedics from the Standpoint of the General Practitioner."

Advertisement and article in an Indianapolis news-

paper concerning the "free" lectures of "Professor" Bragg who was to give a series of talks at the Murat theater, brought to the attention of the Bureau. Complaint concerning "Professor Bragg" whose exploits have received much attention from Better Business Bureaus in other cities and the Department of Investigation of the American Medical Association, was brought to the attention of the Indianapolis Better Business Bureau, the Indiana State Medical Association cooperating in this action with the Indiana Manufacturers of Dairy Products and the Indiana Bakers Association. Full information concerning "Professor" Bragg and his activities may be obtained by writing the headquarters office of the Indiana State Medical Association.

The question was put to the Bureau of Publicity concerning the ethics of the following: An article, written by a physician, which commented upon certain medical uses of tomato juice, appeared in *The Indianapolis Medical Journal*. A canning company asked *The Journal* for the permission of making reprints of this article and sending them to physicians. The editors of *The Journal* asked the Bureau of Publicity for its opinion concerning the ethics of doing this. The opinion of the Bureau was that reprints could be sent provided nothing was mailed

with them which would give a direct or indirect tie-up between the article written and any commercial product sold by the company. It would be all right, according to the Bureau, to mail the article plain, without any letter-head, any accompanying letter or envelopes, or any accompanying literature, which would name the company in any way.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole November 29, 1929.

December 3, 1929.

Meeting called to order at 4:30 p. m.

Present: Wm. N. Wishard, M.D., Chairman; C. P. Emerson, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held November 22 read and approved.

The release, "Smog Sickness", read, corrected, and approved for publication Saturday, December 14.

The following radio talks of the Marion County Tuberculosis Society to be given over station WFBM during the regular weekly time allotted the Bureau of Publicity were approved:

November 30—"The Greatest Life Saving Campaign."

December 7—"The Symbol of Mercy."

December 14—"Save the Children."

December 21—"A Mighty Christmas Gift."

Letter received from the secretary of the LaPorte County Medical Society stating that the preventive medicine campaign of the LaPorte Chamber of Commerce had received the hearty endorsement of the LaPorte County Medical Society.

The attention of the Bureau was called to the bulletin issued by the Better Business Bureau November 14 announcing the fact that the advertising of the Koch Cancer Foundation had been stopped in Indianapolis. The report of the Better Business Bureau follows:

"Some weeks ago this outfit, under the guise of offering a treatise on the 'Danger Signals of Cancer' as pointed out by a 'famous physician and biological chemist' and offering in this connection a 'limited author's edition of this book at two dollars a copy' secured the publication of an advertisement in one local paper. The attention of the paper was called to a report which we had on Dr. Koch and his treatment, with the result that the paper promised that no further advertising of this concern would be acceptable. All daily papers were likewise notified and no further advertising has appeared.

"Koch has been in the limelight with his 'cancer cure' for some time. At his request, we are advised, the Wayne County, Michigan, Medical Society has at different times appointed three committees for the investigation and report on the Koch treatment. Each of the three reports has been unfavorable. The last report closed with the statement: 'Out of the hundreds of cases Koch has probably treated these were demonstrated to us as his best results. In no instance have we found a case where the diagnosis of cancer was absolutely established and where no other form of treatment had been used in which a cure or any decided benefit had ever been obtained.' In 1926 the American Medical Association wrote in their publication: 'Seven years have passed, during which time Dr. Koch has seen fit to keep his secret to himself. During that same time we have been unable to learn of a single instance in which a case of unquestioned malignant disease has been cured by the Koch treatment. On the other hand, we have received information regarding individuals who 'promptly died' after taking the treatment.'

"Recently complaint has been made to the Bureau that there are some doctors in Indianapolis who are using this treatment on their patients, and those coming to

our attention indicate that the treatment has been valueless to them. In one case the patient had been treated with the Koch treatment for nearly a year and stated that she was gradually getting worse.

"The Koch Cancer Foundation is the latest promotion of Koch. In this connection he has also organized the Koch Laboratories, Inc., which latter organization is the sole owner and manufacturer of what Koch calls his 'antitoxin.' 'It is said that there is a contract between the Koch Laboratories and the Koch Cancer Foundation whereby 'the antitoxin will be distributed through the Foundation only to its stockholders and members.' Through a press agent in New York City mimeographed material has been sent to papers throughout the country, prepared in the form of news articles for 'immediate release.' The headlines were so worded as to catch the eye of any who may be interested in the subject of cancer, and specially so as to disguise the advertising feature of these unpaid advertisements. A more complete report on this concern, its history and some of the unfavorable results, is in our files for the benefit of anyone interested."

The secretary was instructed to get information from the Better Business Bureau in regard to newspaper publicity given from time to time upon the findings of the Better Business Bureau. This information was to be used in order that the Bureau of Publicity of the Indiana State Medical Association might draw up a resolution formally recommending that the newspapers publish the findings of the Better Business Bureau as regular news items.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole December 10, 1929.

December 10, 1929.

Meeting called to order at 4:30 p. m.

Present: C. P. Emerson, M.D., J. A. MacDonald, M.D., and Thomas A. Hendricks, executive secretary. (Dr. Wishard, chairman, reviewed the work of the Committee on December 11)

Minutes of the meeting held December 3 read and approved.

The release, "Tribute to United States Public Health Service," read and approved for publication Saturday, December 21.

Radio release, December 14, "Save the Children."

The following reports of medical meetings were received:

December 2—Rush County Medical Society, Rushville, Ind. "Pediatrics—New Developments."

December 3—Rotary Club, Kokomo, Ind., "Modern Life and Heart Disease—Periodic Health Examination."

In accordance with the instructions of the Committee, the secretary made the following report upon the manner in which confidential bulletins of the Better Business Bureau are distributed to the newspapers:

"At the request of the Publicity Bureau your executive secretary talked with T. M. Overley, manager of the Better Business Bureau, in regard to newspaper publicity given to confidential bulletins of the Bureau. Mr. Overley said that a few of the papers get the bulletins, the Bureau having only the right to send these bulletins as exchanges to newspapers under the postal laws, if it is to retain its right to send its bulletins as second class mailing matter. The Bureau has always treated information contained in the bulletins as more or less confidential and available only to the members of the Better Business Bureau. The Bureau, however, always has been pleased to send the bulletins to papers who have asked for them but except in a few instances never has asked papers to give special write-ups on findings and information contained in the bulletins. One of these times the Bureau

did ask was upon the Root cancer case. From time to time *The Indianapolis Times* has quoted from some of the Bureau reports."

The secretary was instructed to call this matter to the attention of the Bureau at a future meeting.

The Bureau voted not to subscribe to *The United States Daily* as information contained in the "Daily" may be obtained from the various medical journals.

The following letter received from Director of Division of Public Health of the Commonwealth Fund, New York:

"For the information of members of your Society there is enclosed an announcement of a new project in the field of public health to be undertaken by the Commonwealth Fund beginning January 1, 1930.

"This project will involve close cooperation with the State Health Department in each state selected. An identical announcement has therefore been sent to the State Health Officer in Indiana and also to the deans of the medical schools. We are sending it to your Society because we desire that the medical profession have complete information regarding this new project for it is our belief that sound public health work depends very largely upon the cooperation and understanding of the medical profession."

The objects of this fund, as set out in a pamphlet accompanying the letter, follow:

1. The establishment, under direction of the state health department, of a field unit for the purpose of organizing and improving county or district health service in rural communities.

2. Medical education.

(a) Assistance to a Grade A medical school which sends a reasonable percentage of its graduates into the state in question: to develop courses in preventive medicine, and to provide special facilities and opportunities for postgraduate work by rural physicians. The appropriation for the teaching of preventive medicine is planned not to exceed \$10,000 per year, and that for postgraduate facilities not to exceed \$15,000 per year.

(b) The establishment at the same medical school of a scholarship or loan fund for the use of not less than five students from the state in question who agree to go into rural practice in that state for a stipulated period after graduation.

(c) The establishments of postgraduate fellowships for physicians in each state.

3. The establishment of one or more postgraduate fellowships for public health nurses.

4. Health Education. Assistance to the state normal schools, or other teacher-training institutions, in providing facilities for the training of teachers in the purposes and methods of health education.

Questionnaire received from the Medical Society of the State of New York in regard to periodic health examinations.

Upon request of the Budget Committee, the Bureau of Publicity has asked for an allowance for the coming year of \$550.00. Letter to the Budget Committee from the Chairman of the Bureau of Publicity follows:

"The Bureau of Publicity has endeavored to be very economical in the expenditure of the sums allotted to it. We are coming out this year with a very small balance. I would recommend that our allowance for the coming year be the same as last year, viz., \$550.00. While we are not spending a penny unnecessarily, we occasionally have emergency expenses which make it seem unwise to ask for less than we had last year."

The following bill was approved for payment:

Central Press Clipping Service.....\$6.90

There being no further business, the meeting was adjourned. The above minutes were approved in each separate part and as a whole December 17, 1929.

INDIANA STATE BOARD OF HEALTH DIVISION OF COMMUNICABLE DISEASE

Monthly Report, December, 1929

The current prevalence of communicable diseases as indicated by the reports from the health officers of the state is shown below by the number of diseases from the urban and rural population as follows: (urban includes cities of 2,500 and over, rural all under 2,500 population):

| Diseases | Total | Urban | Rural |
|-----------------------|-------|-------|-------|
| Tuberculosis | 195 | 136 | 59 |
| Chickenpox | 548 | 436 | 112 |
| Measles | 92 | 85 | 7 |
| Scarlet Fever | 521 | 214 | 307 |
| Smallpox | 653 | 385 | 268 |
| Typhoid Fever | 8 | 6 | 2 |
| Whooping Cough | 74 | 55 | 19 |
| Diphtheria | 123 | 71 | 52 |
| Influenza | 129 | 0 | 129 |
| Pneumonia | 31 | 0 | 31 |
| Mumps | 21 | 21 | 0 |
| Poliomyelitis | 3 | 1 | 2 |
| C. S. Meningitis..... | 56 | 51 | 5 |
| Tularemia | 7 | 2 | 5 |

Smallpox was the most prevalent diseases reported during the month. There were 630 cases the previous month; 553 cases reported the corresponding month the preceding year. The estimated expectancy was 322 cases. The estimated expectancy is based on the experience of the last seven years, including epidemics. The disease holds its reputation for prevalence. Chickenpox is prevalent when there are many cases of smallpox. No doubt, many light cases of the disease are diagnosed chickenpox. There were 594 cases of chickenpox reported last month.

Scarlet Fever shows a decline. Five hundred fifty-seven cases were reported the previous month; 481 cases the same date last year. Scarlet fever is a cold weather disease. An increase will be shown during the winter months.

Typhoid Fever shows a marked decrease. Twenty-two cases last month; 24 cases same month last year. Eight cases of typhoid is the least number of cases reported in December for the last ten years. The estimated expectancy was fifty-seven cases.

Diphtheria shows a decided decrease over the previous month when 211 cases were reported. In December of last year 216 cases were reported. The estimated expectancy for the period is 415 cases. It is a fact that many cases of the disease is not reported by the doctors to the health officers having jurisdiction. This should not be as the reporting of diseases is a vital procedure.

Cerebro-Spinal Meningitis has come into prominence as a prevalent disease, especially in Indianapolis. In fact, the disease is epidemic in Indianapolis. The disease is generally endemic in the state. Every month there are a few sporadic cases reported. The report shows fifty-six cases. Fifty-two cases in Indianapolis and four cases reported out in the state.

Influenza shows a very marked increase. There were only twenty-eight cases reported last month. The corresponding month last year 7,502 cases were reported. The 129 cases this month were reported from the rural population. Strange to say, the cities do not report their cases.

Tularemia shows an increase. One case was reported last month; one case in December of the preceding year. No doubt, when the Doctors familiarize themselves with this disease, more cases will be reported.

During the month, the Director investigated a case of poliomyelitis in Carroll county in company with Dr. John E. Robinson, Health Commissioner of Clinton county.

H. W. McKANE, M.D.
Collaborating Epidemiologist,
Indiana State Board of Health

TIPPECANOE COUNTY MEDICAL SOCIETY

December 12, 1929.

The Tippecanoe County Medical Society met for the December meeting at the Lincoln Lodge with forty members and guests for the dinner.

The minutes of the previous meeting were read and approved as read.

Motion was made and carried that the program committee for the next year be selected before the January meeting.

Motion was made and carried that the Society purchase the Tuberculosis Health Bond as we have done in previous years.

Motion was made and carried that the dues of Dr. George F. Beasley be paid by the treasurer.

Election of officers was the next order of business. Nominations for President consisted of Dr. O. L. McCay, of Romney. Motion was made and carried that nominations be closed. Motion was made and carried that the Secretary cast the unanimous ballot for Dr. O. L. McCay as president. Nominations for vice-president were: Dr. I. G. Ikens. Motion was made and carried that nominations be closed. Motion was made and carried that secretary cast the unanimous ballot for Dr. I. G. Ikens as vice-president. Nominations for secretary consisted of Dr. J. C. Burkle. By consent, J. C. Burkle will serve as secretary for the ensuing year. Nominations for treasurer consisted of Dr. Charles Hupe. By consent Dr. Hupe will serve as treasurer for the ensuing year. Nominations for censor for three years consisted in the nomination of Dr. F. L. Pyke to succeed himself. Motion was made and carried that nominations be closed. Motion was made and carried that the secretary cast the unanimous ballot for Dr. Pyke as censor. Nominations for delegates for two years to the state society consisted of Dr. F. T. Romberger. Motion was made and carried that nominations be closed. Motion was made and carried that the secretary cast unanimous ballot for the society for Dr. Romberger as delegate for two years. Nominations for alternate delegate for two years resulted in the nomination of Dr. I. C. Burkle. Motion was made and carried that nominations be closed and that the ballot of the society be cast for J. C. Burkle as alternate delegate.

A bill for five dollars for decorations and expenses for the social meeting was presented and allowed.

It was reported that the resolutions on the death of Dr. W. R. Moffitt were returned to the secretary and copies have been disposed of according to the motion in the previous meeting.

Dr. F. S. Crockett stated that he did not care to serve on the program committee another year.

Motion to adjourn was carried.

At the social gathering following the business meeting six tables were in use at cards. Several in attendance were compelled to leave at an early hour but a good number remained and everyone present expressed himself as having a good time and enjoying the meeting very much. Honors for the meeting were won by F. T. Romberger, high score, E. VanReed, low score; for the ladies, Mrs. A. B. Coyner, high score and Mrs. R. R. Calvert, low score. A prize was also offered for the euchre table.

J. C. BURKLE, M.D.

Secretary.

The following resolutions concerning Dr. Moffitt are published at the request of the Tippecanoe County Medical Society:

DR. WILLIAM R. MOFFITT

Dr. Moffitt is gone! Sorrowful was the foregoing message that went out over this community on the evening of September 11, 1929.

For more than fifty years his name had been synonymous with ministration to the sick and afflicted of the

city and surrounding country. In all those years his patients' welfare commanded first position in his thoughts; his own desires taking second place. The question of recompense was never considered when duty called. His services, spanning a period of more than a half century, were conspicuous by connecting the experiences of the "old time" doctor with the new. Fifty years ago last February when he opened his office in what is now West Lafayette, that settlement was then such a small village that his practice had to be acquired by going on horseback up and down the forest-covered hills bordering the Wabash river or by going way out into the bleak and lonesome reaches of the Grand Prairie. Night or day, through rain or shine, heat or cold, he, with his saddle bags, rode over unfrequented paths or over bottomless roads administering to the sick. These primitive conditions were followed in succession by better roads and buggies, and later by still better roads and automobiles, along with hospitals that have grown during his professional days from a place of simple neatness and comfort in which to die to scientific institutions in which every opportunity possible is provided for the ailing and sick to be restored to health.

Dr. Moffitt was a native of this county, born December 8, 1849. He, as the saying goes, worked his way through school. He graduated from the Indiana Medical College in February, 1879.

In 1881 he became a member of the staff of St. Elizabeth Hospital, which position he held up to the time of his death. Ten years ago he was relieved from the active duties of that position, since when he has been classed as an honorary member.

He has been an active member in the Tippecanoe County, the Indiana State and the American Medical Associations during almost the entire time he has been engaged in the practice of medicine. For twenty years he was a member of the House of Delegates of the State Association, and for eight years Councilor of the Ninth District.

As a physician he has always stood high among his fellow practitioners and was a friend and wise counselor to the young doctor just starting out on his professional career. Those who have been his confreres, feel that their lives have been made better by having had contact with him.

He led the simple life and had the confidence of his associates and neighbors. He loved the quiet seclusion of his home and derived great pleasure in working among the flower and garden beds that surrounded it. His otherwise congenial home was shadowed for many years by sickness, terminating finally by the loss of his life partner.

Personally he was courteous, sociable, genial, a good mixer. He looked upon the bright side of life; to him every cloud had its "silver lining".

He was public spirited and never shirked doing his duty as he saw it.

He labored long and builded well, and now, since his task has been laid down to be taken up by others:

BE IT RESOLVED: That, in the passing of Dr. William R. Moffitt, his medical confreres have lost an associate who was an inspiration; the community an upright, progressive builder; St. Elizabeth Hospital one of its staunch pillars; his daughter a kind, affectionate and indulgent father; and the local, state and national medical organizations a wise counselor.

And be it further resolved: That this be spread upon the records of our association; a copy sent to the bereaved daughter; and a copy furnished to the local press and THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION.

Committee,

DR. WILLIAM M. RESER,
DR. CHARLES HUPE,
DR. FRANK S. CROCKETT.

JAY COUNTY MEDICAL SOCIETY

The Jay County Medical Society met at the Portland Country Club, Friday, December 6th. The annual election of officers was held after a turkey dinner which sixty-four doctors, their wives and guests enjoyed.

Dr. J. E. Nixon was made president; Russell Clymer, vice-president and B. M. Taylor re-elected secretary.

Dr. Thurman B. Rice, of Indianapolis, presented the principal address, his subject being "Health Fads and Foolishness." The address was much enjoyed by all.

This year has been the best and most active year in the Society's history. We had eleven good meetings out of the twelve, missing only October, when the speaker failed to come. We intend to make 1930 still better, with 100 percent membership, and good programs for each month in 1930.

B. M. TAYLOR, M.D.,
Secretary.

ST. JOSEPH COUNTY MEDICAL SOCIETY

The annual meeting of the St. Joseph County Medical Society was held November 20, 1929.

The morning section at Epworth Hospital consisted of the following program:

9:00-10:00 A.M.—Ward Rounds.

MEDICAL

- Case 1. Lung abscess
2. Colitis (infectious)
3. Pneumonia labor with hydrothorax.
4. Phenol poisoning.
5. Cerebra-spinal lues.
6. Ringworm of scalp.

SURGICAL

1. Salpingitis (bilateral) pelvic peritonitis
2. Carcinoma intestines.
3. Carcinoma cervix.
4. Skull fracture (basal).
10:00-11:00 A. M.—Pathological Conference (four cases) presented by Dr. Marcus W. Lyon, Jr., and Dr. A. S. Giordano.
11:00-12:00 A.M.—Surgical Clinic—Dr. Willis Dew Gatch, Professor of Surgery, Indiana University.
Case 1. Osteomyelitis, humerus.
2. Osteomyelitis, innominate.
3. Lung abscesses.
4. Perinephritic abscess with pulmonary tuberculosis.
5. Traumatic abdomen.
6. Fracture, vertebra.

The afternoon session, at the Oliver Hotel, consisted of the following program: "Proctology and Focal Infection."—Dr. Louis J. Hirschmann, Professor of Proctology, Detroit College of Medicine and Surgery.

"A Consideration of Some of the Common Mistakes in Abdominal Diagnoses", Dr. Willis Dew Gatch, Professor of Surgery, Indiana University.

"Hypertension", Dr. George E. Brown, Mayo Clinic.
"Some Common Behavior Problems in Children", Dr. Bert I. Beverly, Neurologist, Children's Memorial Hospital, Chicago, Ill.

The annual dinner was held at the Oliver Hotel at 6:30 and attended by about one hundred members and guests from adjoining towns. Dr. Phillip H. Kreuscher, of Chicago, Ill., Vice-president-elect American College of Surgeons, gave the address of the evening on "The Relation of the Physician and of the Patient to the Hospital." The discussion was general by mostly out of town doctors.

The St. Joseph County Medical Society met in the Public Library November 26, 1929, with President Huffman in the chair. Dr. Alexander Mott was elected a member.

Doctor Knode spoke of a campaign for immuniza-

tion against diphtheria and vaccination against small-pox which is being considered.

Doctor Fisher reported two cases with x-ray plates, one diverticula of the esophagus, following fish bone, as a child, and another of multiple strictures of the esophagus, following lye at two years of age.

The paper of the evening was by Dr. W. H. Baker on "Carcinoma of the Breast." This was discussed by Doctors Giordano, Fisher, Hyde, and M. W. Lyon, Jr.

The annual business meeting of the St. Joseph Medical Society was held December 3, 1929, at the Public Library. Following the reports of committees the following officers were elected for 1930: President, Dr. George J. Geisler, South Bend; vice-president, Dr. M. D. Wygant, Mishawaka; secretary-treasurer, Dr. R. B. Dugdale, South Bend; assistant secretary-treasurer, Dr. Martha Lyon, South Bend; board of census, Dr. H. L. Cooper; delegates, Dr. John B. Berteling and Dr. A. S. Giordano; alternates, Dr. R. L. Sensenich and Dr. M. W. Lyon, Jr.

A dinner meeting of the St. Joseph County Medical Society was held at the Oliver Hotel December 11, 1929, with eighty members and guests present.

Dr. Charles P. Emerson, of Indianapolis, Dean of Indiana University School of Medicine, spoke on "The Importance of the Emotions in Internal Medicine." Paper was discussed by Drs. Sensenich, Hoffman, Stoltz, and Dr. Fleming, of Elkhart.

MARTHA BREWER LYON, M.D.
Assistant Secretary and Treasurer.

WABASH COUNTY MEDICAL SOCIETY

Wabash, Indiana,
December 6, 1929.

The Wabash County Medical Society had its regular monthly meeting at the Indiana Hotel, Wabash, December 5th, in the form of a six o'clock dinner, the hosts being Drs. Biggerstaff, Kidd and Rhamy.

The election of officers for the coming year resulted as follows: President, Z. M. Beaman, North Manchester; vice-president, J. Gordon Kidd, Roann; secretary-treasurer, O. G. Brubaker, North Manchester; councilors, James Wilson, Wabash; P. G. Moore, Wabash; L. E. Jewett, Wabash; legislative committee, Ira E. Perry, North Manchester; James Wilson, Wabash; J. L. Walker, Lafontaine.

This meeting was the best and the most enjoyable meeting of the year. There were twenty-two doctors present.

We hope to make the coming year more successful than ever.

Respectfully,
O. G. BRUBAKER, M.D.
Secretary-Treasurer.

NORTHEASTERN INDIANA ACADEMY OF MEDICINE

Lagrange, Indiana
December 10, 1929.

The Northeastern Indiana Academy of Medicine has affiliated itself with the Northwestern University of Chicago, for the year 1930.

We just completed a very successful eighteen-meeting program with the Indiana University.

The Academy had an election at its regular meeting at the Gawthrop Inn, December 5th, with thirty-six physicians present out of a total number of sixty-two members in good standing. They elected the following officers:

Dr. C. E. Munk, of Kendallville, as president; Dr. J. E. Rarick, Wolcottville, vice-president; Dr. A. J. Hostetler, LaGrange, secretary-treasurer.

The out-going president, Dr. S. S. Frazier, of Angola, made a gavel for the Academy and made the following presentation speech:

"As this is the last meeting for the year 1929 I want to take this opportunity to thank you kindly for the honor of being your president this year. I also want to thank you for the wonderful attendance and courteous treatment given me during this same time. Again I want to thank you for your pilgrimage to the state park in June, and the attendance and courteous treatment when there.

And now this Society has been in existence for about six years, and so far as I can find out this Society does not possess that instrument which all well regulated Societies should have in their possession, and possibly do possess, and that is a gavel.

This being the case I began about six months ago to collect material for such an instrument; with no little effort, time, gasoline and mileage (on my automobile) this material was secured. This is more than a gavel to all concerned; more than a piece of wood with a handle in it to call this Medical Society to order. This gavel is composed of eight pieces of wood, collected from Noble, LaGrange, DeKalb and Steuben counties. When this collection was finished the wood was taken in my work shop, and there by ten, twenty and thirty minute periods each and every piece of wood was worked into a perfect square and fitness to be placed in this gavel. When this work was completed the task of placing the different colored woods in a position so they would look their best, and show to the best advantage in this gavel, was in order. The eight pieces of wood were then put together with that ever sticking glue, which never lets go. The eight pieces of wood formed a square block, representing the square of the four counties in a Medical Society.

The glue is symbolical of the By-Laws holding together the counties in our Society. It was necessary now to let the glue harden so in turning there would be no flaws in this gavel. With one hundred twenty miles travel the artist in his profession was found who could turn this piece of wood into the beautiful gavel it is. After this was finished the gavel was sent away and upon its return around either end was placed a band of gold. This gold represents Purity; also is an indestructible metal. It cannot be destroyed by heat, acid, nor will the elements have any effect on it. The gold was securely fastened on this gavel by the same glue which holds the eight pieces of wood together, with the addition of three nails of gold in each band, they are held in place with the same glue holding the gavel together. This gold represents that everlasting Fraternity which exists among the members of this Society.

At this time the gavel was useless, so a handle was placed in it, using the same glue to make it secure and making it as one piece of wood. To separate these pieces of wood would mean a destruction of the gavel. To separate the four counties would mean the destruction of the Medical Society. So in this way the gavel represents the solidity of this Society.

At this time to have a finished product the gavel took another journey. It was now necessary to have a filler placed on the different kinds of wood in order to make each and every piece of wood have a smooth surface. This was accomplished by giving it two coats and then rubbing off the surplus so the gavel was as smooth as though it had been made of glass. It was then coated over with a substance and rubbed down; another coat and a third one before it was completed; these coats were to bring out the beauty in each piece of wood and protect the wood from the elements so that it would be everlasting as far as tarnishing is concerned.

These last coats represent each member of the Society in an educational way—a finished student. It also represents a filling up of the mind with good things of life, and also represents a protection which each man has for his community against every kind of evil, sickness, and disease. Also, it represents a confidence. You are each and every one a store of knowledge or an encyclopedia to the people you serve. You are consulted on Medicine, Politics, Religion and Law. Just this week my 'phone bell rang and when I answered the call this was the question put to me: "What time does the train leave Montpelier, Ohio, this afternoon for Detroit?" I told the lady 3:20 Central Standard time. "Thanks", she said, and hung up the receiver. This confidence may be explained again by Norman Rockwell's picture, "A Serious Case". A little girl brings her dolly to her old doctor for examination and treatment. The good old doctor is examining the dolly and will certainly give this little girl some medicine for her baby. You have all done the same kind act to the children many times. Get the goodwill and confidence of the children and you have the family.

Doctors, with this meager description of this gavel—how the material was collected, and each step of its construction, and what it all means to the members of the Society, and the Society as a whole, I would like at this time to present this gavel to the Northeastern Indiana Academy of Medicine for your inspection and acceptance. If worthy we present it as our token of friendship, love and truth and last, but not least, the best of fraternal feeling, which can exist among a group of men so closely bound together as this Medical Society.

With the highest personal regards I want to thank you

again for the courtesies, and the honors that you have bestowed upon me as your President for the past year."

Respectfully submitted,

A. J. HOSTETLER, M.D.

Secretary-Treasurer.

INDIANAPOLIS MEDICAL SOCIETY

December 21, 1929.

On December 3 the Indianapolis Medical Society held a dinner meeting at the Athenaeum. The attendance was one hundred ten. The application of Dr. C. L. Richardson, of Indianapolis, was presented to the society. The scientific program was by Dr. S. W. Harrington, of the Mayo Clinic, as guest speaker. His subject was "Diaphragmatic Hernia", and was illustrated with lantern slides. Following the scientific program the election resulted in the selection of the following officers for 1930: Dr. J. A. MacDonald, president; Dr. M. Joseph Barry, first vice-president; Dr. Harry J. Weil, second vice-president; Dr. Chester A. Stayton, secretary-treasurer; Dr. J. W. Carmack, council; Dr. Harry L. Foreman, council; Dr. Raymond C. Beeler, Dr. Walter F. Kelly, Dr. A. F. Weyerbacher, Dr. H. G. Hamer, Dr. Herman Morgan and Dr. Frank C. Walker, delegates; Dr. Murray N. Hadley, Dr. Karl L. Ruddell, Dr. C. H. McCaskey, Dr. Cleon A. Nafe, Dr. M. J. Spencer, and Dr. J. R. Lewis, alternate delegates, and Dr. S. E. Earp, librarian.

The regular meeting of the Society on December 10 was held at the Athenaeum. Attendance eighty. A case report program was as follows: "Juvenile Tuberculosis Complicated by Bronchial Asthma", Dr. T. J. Beasley; "Parinaud's Conjunctivitis", Dr. E. G. Anthony; "Pulmonary Tuberculosis", Dr. C. E. Bohner; "Generalized Carcinomatosis", Dr. E. M. Aikman; "Congenital Dislocation of the Hip", Dr. Gordon Batman; Discussion, "First Stage of Labor", Dr. G. B. Jackson; Discussion by Drs. Mendenhall and Adkins.

The regular meeting on December 17 was held at the Athenaeum. Attendance eighty-five. Dr. Joe W. Sovine of Indianapolis, was elected to membership. The following scientific program was given: "Varicose Ulcers", Dr. E. B. Haggard; "Treatment of Varicose Veins by the Injection Method," Dr. O. K. McKittrick; "Supra-Condylar Fractures of the Humerus", Dr. E. B. Mumford. The papers of Dr. C. E. Bohner, on December 10 and Drs. Haggard, Mumford and McKittrick on December 17, might be suitable material for publication.

On January 7, 1930, the Society invited the ladies to attend the annual meeting. At this meeting the new officers were installed and the old officers made their reports.

Following the dinner and business meeting an elaborate vaudeville show was arranged by Mr. Roltare Eggleston, former manager of Keith's theater in Indianapolis.

CHESTER A. STAYTON, M.D.

Secretary.

FLOYD COUNTY MEDICAL SOCIETY

New Albany, Indiana,

December 13, 1929.

The Floyd County Medical Society met in annual meeting at the Hotel Tavern, on the above date with Dr. Anna McKamey, the president, presiding. A goodly number of doctors were present. Minutes of previous meeting were read and approved, and the regular routine of business transacted.

The application of Dr. Charles W. Stolzer for membership to the Society was presented, and was referred to the board of Censors to be voted on at the next regular meeting.

This being the annual meeting the election of officers took place at this time. The Chair appointed the following nominating committee: Drs. William Winstandley, William H. Garner and Henry B. Shacklett, who placed the nomination of the following ticket: For president, Dr.

Percy R. Pierson; vice-president, Dr. James Y. McCullough; secretary-treasurer, Dr. Philip H. Schoen; censors, Dr. William L. Starr, chairman; Dr. Robert W. Harris, and Dr. Henry B. Shackett. A motion was made to accept the report of the nominating committee. Voted on and carried unanimously.

This meeting was more than annual meeting and banquet night, but was ladies night as well. The doctors present brought their wives and daughters with them which added to the attractiveness of the occasion as well as an enjoyable feature of the affair.

There had been no scientific program prepared, it was social only. As the guests entered the dining room, Mrs. Walter A. Hall sang "Silent Night", accompanied on the piano by Miss Evalyn Aldrich. After the guests were seated at the table, Mrs. Hall sang a number of solos, accompanied by Miss Aldrich, which were highly appreciated by the doctors and the ladies.

Miss Elsie Fullenlove gave a couple of readings, one, in which she drafted Dr. Starr to assist her in the role of her baby brother. This was immensely enjoyed by all, including Dr. Starr, who played his part to perfection.

We also had as our guest of honor, Dr. Hugh Mahaffy, Dr. James Baxter and Dr. Carl P. Schoen, of the Louisville City Hospital, Dr. Hubert Medley, intern of St. Edwards Hospital and Oscar Knofel, pharmacist and manager of the Physicians' Exchange.

The doctors' wives being present, it was thought an appropriate time to organize a Ladies' Auxiliary, which the ladies proceeded to do, naming Dr. Anna McKamey, chairman pro-tem, who will call a meeting in the near future to complete the organization.

The visitors were called on for short talks to which they willingly responded. The doctors in turn gave brief talks. Dr. McCullough suggested a plan to increase the attendance to our meetings, "that the secretary appoint those members who attend regularly to bring one member along who has not been attending regular or seldom." The suggestion was well taken and will be complied with by the secretary.

As usual the Tavern people furnish an excellent turkey dinner to which the hungry doctors and guests did ample justice.

A rising vote of thanks was extended to the entertainers, whereupon the meeting adjourned.

ANNA MCKAMEY, President.

P. H. SCHOEN, Secretary.

CORRESPONDENCE

WHO KNOWS ANYTHING ABOUT DR. ARNOLD?

Paul W. Maloney, Attorney-at-Law,
308 Vincent Building,
615 Commercial Place,
New Orleans, La.

Editor, THE JOURNAL:

I will thank you if it is possible for you to give me any information in regard to the following:

I understand that there was a Dr. Arnold who was a professor of medicine or a practicing physician in one of the universities in Indianapolis between 1860 and 1870 or thereabouts.

• Of course, I appreciate that this is very little information on which you have to work, but this is all the information I have at present.

My reason for seeking this information is that a daughter of this Dr. Arnold recently died in the city of New Orleans without heirs locally, and the only information that we could get is that her father was a professor of medicine in some institution in Indianapolis and that his deceased daughter, Rose Lee Arnold, was a telegraph operator in the same city about 1875, so I theorize that her father practiced medicine in Indianapolis be-

tween 1860 and 1875, or even later. As this is an estate matter we are trying to locate any of her heirs and if there is any assistance you may be able to render along this line, it will be appreciated and made worth while.

Please give this your immediate attention if possible.

Yours very truly,

RICHARD DALCHE.

FAIR FEES

Sullivan, Indiana

December 24, 1929.

Editor THE JOURNAL:

I have read your editorial in THE JOURNAL of December 15, 1929, on "Fair Fees" with some interest. There can, of course, be no argument when the fee is unfair, but I wonder why you stress the "small town" surgeon so much. Do you wish to leave the impression that it is only the "small town" physician who is unfair, or do you believe the "small town" surgeon is never entitled to a fee equal to the city surgeon? Perhaps you would lead us to infer that we have no "small town" surgeons who are capable enough to be entitled to charge the equivalent of the city surgeon. Why condemn the small town surgeon because of location? Why not let the work speak for itself? Perhaps not all good surgeons or good physicians are located in the city and possibly not all bad ones are in the small town. Rochester, Minnesota, is really a small town, you know.

J. R. CROWDER, M.D.

(Answer: The criticism is justified, even though the editor had no intention of leaving the impression that physicians practicing in small cities or towns are in any sense lacking in general in propriety or professional ability. In fact, THE JOURNAL often has praised the general run of country physicians for possessing a high grade of ethics and professional ability, and it is unfortunate that the incidents to which attention has been called happened to concern men practicing in some of the smaller cities. Such incidents are just as common if not more so in the large cities, and are reprehensible wherever they occur. In fact, owing to greater competition, the proportion of medical men who are guilty of unethical conduct, gross commercialism, and the exhibition of professional incompetency probably is greater in the cities than in the urban communities. As our correspondent well says, "the work should speak for itself" though we again offer the comment that no matter where the work is done, the fee should be consistent.

—Editor.)

COLLECTION AGENCIES

Indianapolis,

December 11, 1929.

To the Editor:

A new scheme to help us poor M. D.'s collect just accounts long overdue has come to my attention. After investigation I am rushing to enlist your aid in broadcasting the universally desired news. I have tried it on two cases and feel qualified therefore to recommend it—expert testimony, as it were.

Allow me to briefly summarize this scheme as follows: making allowances if you please for slight typographical errors because of my breathless eagerness to bring the glad tidings:

A patient, G. H., has owed me \$100. I put the case for collection in the hands of the Medical Arts Credit Bureau, who turn it over to the Schloss Brothers Investment Company, lenders of the Helping Hand. Their representative proposes this: We will cut the bill to \$70. He will give me a check for \$57. He will collect \$5.85 monthly from G. H. who is "good" until the \$70 are paid. At the end of a year his return for his trouble will be \$13 on an investment of \$57. His security is a note to be signed by me for \$57 "so in any case I do not stand to lose by the transaction."

The joker lies in small print in which the co-maker of the note is liable for the full amount of the note upon failure of one payment.

After collecting three months payments, the note is sent to me for collection in full, as a payment has lapsed. If I refund \$50 of the \$57 at this time, let us see how the Schloss Brothers Investment Company have fared. First, they have risked nothing as I am their security. Second, on a secure investment of \$57, in four months time they stand to make \$13 in round figures. That is at the approximate rate of 78 percent per annum. I lose an account, gain nothing but the privilege of receiving correspondence from Schloss Brothers.

Now I would hesitate to think that a reputable firm would with malice aforethought exert themselves to collect the first payments which pay them out, then lose interest in further payments which would benefit me. A physician habitually plays the Good Samaritan both pathologically and financially to his patient, and is loathe to believe that a reputable investment company would stoop to such a sharp practice, even though 'tis legal.

In fact, I believe this so securely, that I have aided the Schloss Brothers in every way to secure from G. H. the payments due. He has continually been behind so that I have had to make good his payments on a few occasions. This has consumed some months, so that in this second instance the possible 78 percent profit has dwindled to where it will be reasonable in a few more months—providing that the rising febrile condition of correspondence received does not encourage me to help out Eli and Sol by paying the residue in one lump. They do put out encouraging letters, and my advice to M. D.'s who are short on correspondence is to send their accounts to the Schloss Brothers Investment Company. I feel sure that they can show you an investment well worth while: 78 percent per annum with perfect security and no risk! So here is to Eli, Louis, Abe and Sol—good old 78 percenters!

Very truly yours,

THOMAS B. NOBLE, JR.

P. S. The first case lasted until the first lapsed payment, when I refunded almost the entire amount received. It has been suggested to me that perhaps the S. B. I. C. collect a down payment from the G. H.'s and that this determines how many months the "payments" run—but I feel sure this is wrong. So sure that I have made no effort to find out. You know I believe in playing fair and I do not want the services of the boys misunderstood.

BOOK REVIEWS

THE PATHOLOGY OF THE EYE. By Jonas S. Friedenwald, A.M., M.D., F.A.C.S., Associate in Pathological Ophthalmology at the Johns Hopkins University, Pathologist of the Wilmer Ophthalmological Institute of the Johns Hopkins University and Hospital. Illustrated. 346 pages. Cloth. Price \$4.50. The McMillan Company, New York, 1929.

Perhaps the ophthalmologist may think that he wants a more comprehensive work on the pathology of the eye, but he certainly will find this little book of Friedenwald's a most convenient reference book and exceptionally complete and up-to-date for its size. It is the outcome of a course of lectures for the instruction of medical students and surgical house officers in the Department of Ophthalmology of the Johns Hopkins Medical School and Hospital, and will be found to have wide acceptability among any students and practitioners of medicine who may be either directly or indirectly interested in the eye. It is beautifully illustrated with original illustrations which elucidate the text in a remarkable manner. The subject matter may be epitomized, but nevertheless it is as trust-

worthy and as comprehensive as can be expected in a textbook of small size. Aside from the discussion of the various pathological lesions of the eye there is an appendix which gives a brief discussion of microscopic technique and latest methods of preparation of specimens.

MRS. EDDY. The Biography of a Virginal Mind. By Edwin Franden Dakin. 553 pages. Charles Scribner's Sons, New York and London, 1929. Cloth. Price \$5.00.

This biography of Mrs. Eddy is intensely interesting from the fact that it is pitiless in its exposure of the inconsistencies and human frailties of a psychopathic woman who, possessed of a dominating personality, insatiate greed for power and wealth, and an indomitable will, was able to demand and receive homage, obedience, money tribute and idolatrous worship from thousands of dupes who were willing to give blind adherence and apparently sincere belief in her irrational and false teachings. A religion or a cult that can teach and uphold falsity in the face of incontrovertible facts proving the opposite, is incomprehensible to rational minds. Mrs. Eddy was a psychopathic character who had visions of power, wealth and grandeur, and was given to self-adulation. In her attempts to secure her advancement she taught and practiced deception of the most flagrant type, and dishonesty that in general appraisal of human conduct is considered inexcusable, but the strange feature connected with her life and activity is that she was able to secure such a large following that also looked upon deception and falsity as practiced by Mrs. Eddy as justifiable if not commendable. In fact, Mrs. Eddy as well as her disciples of the past, as well as the present, live a life that essentially is hypocritical insofar as their conception of mind controlling matter is concerned. Whenever they are compelled or find it necessary to be rational or honest in their consideration of the reality of what they try to make themselves believe is imaginary or non-existent, then they give the deviation the benefit of their diagnosis as "error," and apparently they are quite sincere in believing that any kind of action or thought is justified if it is in the interest of the maintenance of their belief. This is clearly pointed out by the biographer, who has been fair and impartial in his exposure of these human frailties, and he has availed himself of a mass of authentic information to paint the picture in a way that is fascinating. On the whole the book is an interesting and entertaining psychological study.

MEDICAL LEADERS. From Hippocrates to Osler. By Samuel W. Lambert, M.D., and George M. Goodwin, M.D. 331 pages, illustrated. Cloth. Price \$5.00. The Bobbs-Merrill Company, Indianapolis, 1929.

This is a very interesting resumé of the history of medicine from the time of Aesculapius, Hippocrates, Galen and other patriots, down to Gorgas and Osler of the twentieth century. Included in the book is a description of surgery in Rome in Galen's time, the practitioner of the sixteenth century, the surgeon-barbers, or perhaps we should say barbers who did surgical work, the revival of scientific investigation and experiment, the evolution of pathological anatomy, the foundations of bacteriology, and the growth of surgery, are but a few of the interesting chapters in a book that offers worthwhile reading for every practitioner of medicine. Very naturally, emphasis has been laid on the most prominent leaders in the struggle for a better understanding of life, illness and death.

GYNECOLOGY. A Textbook of the Diseases of Women. By Lynn Lyle Fulkerson, A.B., M.D., F.A.C.S., Instructor in Obstetrics and Gynecology, New York Post Graduate Medical School, etc. 842 pages, with

612 illustrations, three in color. Cloth. Price \$9.00. P. Blakiston's Son and Company, Philadelphia, 1929.

This book is intended for the general practitioner, interne and student, though it will be appreciated by the physician who makes a specialty of gynecology. The subject matter is treated in a manner that seems most logical, beginning with anatomy and developmental anomalies, the normal and abnormal forms and positions of the uterus, and then the various diseases of the external genitalia, vagina, cervix, uterus, fallopian tubes, ovaries, and urinary tract. Following this are special chapters on diseases of the anus and rectum, backache, gonorrhea, syphilis, tuberculosis, protein therapy, iodized oil in gynecology, radium, electrotherapy, ultraviolet radiation, the sedimentation test, anesthesia, and blood transfusion. The remaining twelve chapters are devoted to the various gynecological operations or operations related thereto.

The aim of the author, as expressed in the preface, seems to have been carried out in a most excellent way, his idea being to present in a simple, clear, concise, yet comprehensive manner, the essentials of medical and surgical gynecology as practiced by the active leaders in this special field. The author especially emphasizes the time saving use of the knife instead of the scissors, and a continuous suture rather than an interrupted suture, for an equally satisfactory or better result may be obtained.

The author has quoted freely from standard authorities, and a comprehensive, trustworthy bibliography accompanies the work. The illustrations are excellent, particularly those with reference to the continuous rather than interrupted sutures, and the general mechanical work is all that could be desired.

GYNECOLOGIC TECHNIC. By Thomas H. Cherry, M.D., F.A.C.S., Professor of Gynecology, New York Postgraduate Medical School and Hospital, etc. 678 pages, with 558 half-tone and line engravings. Cloth. Price \$8.00. F. A. Davis Company, Philadelphia, 1929.

The author of this book frankly admits that it is not intended as a textbook for the undergraduate student of medicine, inasmuch as the necessary rudiments, such as physiology, symptomatology, and diagnosis have been omitted. However, the book should aid the general practitioner of medicine who comes in contact with gynecological patients, and to whom they look for relief. The book is a technical work on gynecology, with special reference to operations, a comprehensive description of which is given, though standard operations are considered and there are lengthy discussions concerning the relative merits of different operations for the same condition. In short, the author has attempted to propound truths alone, based upon a foundation of what should be the principle of all medical teaching, namely anatomy and pathology. Sufficient illustrations are given to elucidate the text, and in connection with operations the various steps are illustrated so that the reader may follow readily to the completion of the operation. The illustrations, of which there are 558 half-tone and line engravings, are from photographs and pen and ink drawings by the author and they add very materially to the value of the book.

MINOR SURGERY. By Frederick B. Christopher, M.D., Associate in Surgery at Northwestern University Medical School, Chicago. With a Foreword by Allen B. Kanavel, M.D., Professor of Surgery, Northwestern University Medical School. 694 pages with 465 illustrations. Cloth. Price \$8.00. W. B. Saunders Company, Philadelphia and London, 1929.

This is a splendid book, much-needed, and well prepared. As stated by a prominent surgeon in the foreword to the book, "There is no greater field for good surgery than is presented by minor surgery, and Dr. Christopher has done the profession a real service in emphasizing the importance of competent care of this group of patients."

Major surgery is rarely attempted by any one without

certain minimum qualifications, but every one, regardless of special training, practices minor surgery. Therefore, the practice of minor surgery would require a broad general knowledge of surgical diagnosis, and the ability to differentiate the major surgical cases from the minor ones. The author sets forth the methods and procedures which have been useful in his hands, though he also has attempted to gauge the methods which have proved valuable and successful in the hands of others. As is pointed out, the necessity for such a textbook is emphasized by the great increase of accidents associated with industrial development or motor traffic which come under the care of the practitioner nearest the scene of the accident regardless of his surgical experience. Persons thus injured must be given immediate and well-advised treatment, since the subsequent course of the injury is in a large measure determined by the emergency treatment rendered. Too often minor surgery becomes major surgery through careless or incompetence. This book, therefore, will be of especial value to the young practitioner, the intern, and those who may not have been especially trained in surgical technic, and particularly as the textbooks dealing with major surgery do not provide any great amount of information concerning minor surgery. In short, Dr. Christopher has done the profession a real service in the publication of this book.

DISEASES OF THE CHEST AND THE PRINCIPLES OF PHYSICAL DIAGNOSIS. By George William Norris, A.B., M.D., and Henry R. M. Landis, A.B., M.D., Sc.D., and chapters by Charles M. Montgomery, M.D., and Edward B. Krumbaar, M.D. Fourth edition, revised. 954 pages. Illustrated. W. B. Saunders Company, Philadelphia and London, 1929. Cloth. Price \$10.00.

Physical diagnosis is a subject to which too little attention is given by the average practitioner of medicine. In this excellent work, now in its fourth edition, an attempt has been made to emphasize and elucidate by means of suitable illustrations the subject of physical diagnosis, with especial reference to diagnostic acoustics, because the authors believe that only through the comprehension of the laws of sound production and transmission can the results of percussion and auscultation be interpreted intelligently. Throughout the work there is a manifest effort to give practical, working knowledge of the physical diagnosis of heart and lungs in health and disease, and to omit nothing of practical diagnostic use. The book is divided into four parts, the first, of twelve chapters, pertains to examination of the lungs; the second, or eight chapters, devoted to the examination of the circulatory system; the third, or three chapters, devoted to diseases of the bronchi, lungs, pleura and diaphragm; and the fourth, or seven chapters, devoted to diseases of the pericardium, heart and aorta.

In this last or fourth edition of the book an effort has been made to bring the text thoroughly up to date by the addition of new material, and with revisions where indicated. A new chapter has been added, giving a brief account of the part that the bronchoscope plays in the diagnosis of affections of the respiratory organs. While due attention has been given to laboratory aids, for the most part they are considered as merely corroborative and not diagnostic, and the authors well say that for the clinician it would be well to remember that the laboratory should be their partner and not their master, for the surest road to success lies in mastering the old and well-tried methods.

YOUR NOSE, THROAT AND EARS. Their Health and Care. By L. W. Oaks, M.D., and H. G. Merrill, M.D. 167 pages. D. Appleton and Company, New York and London, 1929. Cloth. Price \$1.50.

All people today are more interested in learning of those things that will keep them from physical and mental illness than ever before in the world's history. Health education is becoming more general, and keeping

people well is one of the functions of the twentieth century physician. This little book brings home to the lay reader lessons of health as they pertain to the nose, throat and ears. The discussion is written in untechnical language and discusses the functions, abuses, deformities and disorders of the ears, nose and throat together with simple preventive measures. There are many useful illustrations. From the medical standpoint, exceptions could be taken to some of the statements concerning the cause and prognosis of certain diseases, about which there may be a difference of opinion, but on the whole the book contains very trustworthy information for lay readers.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

DIGITOS AMPULES, 5 cc.—Each ampule contains digitos (New and Nonofficial Remedies, 1929, p. 138), 5 cc. H. K. Mulford Co., Philadelphia.

LUMINAL CAPSULES, 1½ grains.—Each capsule contains luminal (New and Nonofficial Remedies, 1929, p. 81) 1½ grains. Winthrop Chemical Co., Inc., New York.

METAPHEN 2,500.—It contains 1 part metaphen (New and Nonofficial Remedies, 1929, p. 272) dissolved in 2,500 parts of water containing 0.33 per cent each of sodium bicarbonate and sodium carbonate. Abbott Laboratories, North Chicago.

DIPHThERIA TOXOID-SQUIBB.—This diphtheria toxoid (New and Nonofficial Remedies, 1929, p. 368) is also marketed in packages of one 30 cc. vial. E. R. Squibb & Sons, New York. (*Jour. A. M. A.*, November 9, 1929, p. 1471.)

DIPHThERIA TOXOID-CUTTER.—Diphtheria toxoid (New and Nonofficial Remedies, 1929, p. 368) prepared from diphtheria toxin whose L+ dose is 0.2 cc. or less by treatment with 0.3 to 0.4 per cent formaldehyde. It is tested for antigenic potency by injection into guinea pigs. It is marketed in packages of one immunization treatment of three 1 cc. vials; in packages of ten immunization treatments of thirty 1 cc. vials; also in packages of one 30 cc. ampule. Cutter Laboratory, Berkeley, Calif. (*Jour. A. M. A.*, November 16, 1929, p. 1559.)

SOLUTION OF INVERT SUGAR-LILLY.—A solution of a mixture of dextrose and levulose, obtained by the inversion of sucrose. Solution of invert sugar-Lilly is used in the injection treatment of varicose veins. It is claimed that the use of sugar solutions such as solutions of dextrose or of invert sugar have the advantage over solutions of sodium chloride, sodium salicylate or mercuric chloride in that they do not cause severe cramps or sloughing if accidentally injected outside the veins. Solution of invert sugar-Lilly is marketed in ampules containing 5 Gm., 6 Gm., and 7.5 Gm., respectively, in 10 cc. Eli Lilly & Co., Indianapolis.

SULPHARSPHENAMINE-DE PREE, 0.5 Gm. Ampules.—Each ampule contains sulpharsphenamine-De Pree (New and Nonofficial Remedies, 1929, p. 71) 0.5 Gm. De Pree Chemical Co., Holland, Mich.

SULPHARSPHENAMINE-DE PREE, 0.9 Gm. Ampules.—Each ampule contains sulpharsphenamine-DePree (New and Nonofficial Remedies, 1929, p. 71) 0.9 Gm. De Pree Chemical Co., Holland, Mich. (*Jour. A. M. A.*, November 23, 1929, p. 1649.)

PROPAGANDA FOR REFORM

TOXOGON NOT ACCEPTABLE FOR N. N. R.—Toxogon is the therapeutically suggestive name applied by the Von Winkler Laboratories, Inc., Chicago, to a preparation proposed for the treatment of infectious diseases, particularly gonorrhea. The Council on Pharmacy and Chemistry found Toxogon unacceptable for New and Nonofficial Remedies because its composition was not adequately declared; because no evidence was available to indicate that the composition and uniformity of the

product was controlled; because the claims advanced for it were unwarranted in the light of the available evidence; and because it is marketed under a therapeutically suggestive name. When the Council's report was submitted to the Von Winkler Laboratories, a reply was received which submitted further information but which did not permit a revision of the rejection of Toxogon. (*Jour. A. M. A.*, November 2, 1929, p. 1383.)

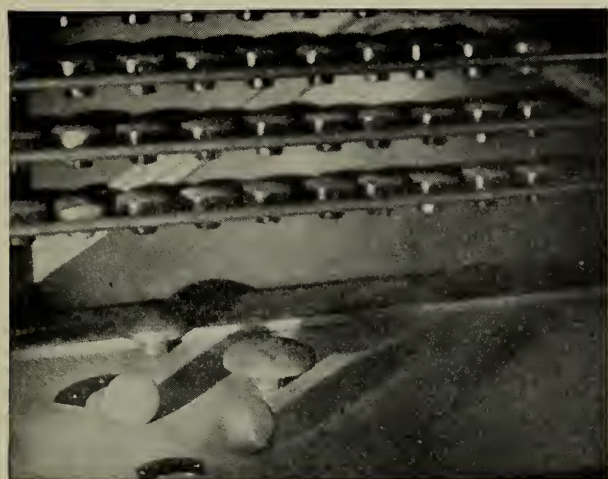
MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the Food, Drug and Insecticide Administration of the United States Department of Agriculture which enforces the Federal Food and Drugs Act: Acid Iron Mineral Compound (A-I-M) (Acid Iron Mineral Percolating Corporation) consisting essentially of a brownish-colored, slightly acid solution of iron, aluminum and magnesium sulphates, with a small amount of phosphates. Allenrhu (Alle-Rhume Remedy Company) consisting essentially of sodium phosphate and sodium sulphate, with small amounts of sodium salicylate and colchicine, some free acid, in a mixture of glycerin and water, flavored with licorice and wintergreen. Nozol (Nozol Company, Inc.) consisting of a heavy petroleum oil, containing menthol and camphor, colored with red dye. Lane's Cold Tablets (Kemp and Lane, Inc.) consisting essentially of acetanilid, with small amounts of quinine sulphate, camphor and aloin. Asceine (Serra, Garabis and Company) consisting essentially of caffeine, phenacetin (acetphenetidin) and aspirin (acetylsalicylic acid). Zonite (The Zonite Products Company) consisting essentially of a solution of sodium hypochlorite, yielding approximately 1 per cent of available chlorine. Fildrysine (Drug Company) consisting essentially of iodides of potassium and sodium with small amounts of compounds of arsenic and mercury, a trace of berberine, glycerin, alcohol and water. Jayzon's Laxative Cold Tablets (D. C. Leo and Company, Inc.) consisting essentially of acetanilide, with a small amount of cinchona alkaloids and certain extracts of plant drugs, such as aloe, podophyllum and capsicum. (*Jour. A. M. A.*, November 2, 1929, p. 1404.)

QUICAMPHOL (TRANSPULMIN) NOT ACCEPTABLE FOR N. N. R.—In 1927 the Council on Pharmacy and Chemistry considered Transpulmin, offered by the Chemisch-Pharmazeutische A.-G., Bad Homburg, Germany, "for the painless parenteral quinine-therapy in inflammatory affections of the lower air passages." The Council found the preparation unacceptable and submitted its findings to the German firm. The firm adopted the name Quicamphol for the preparation and took other measures in an effort to make the product acceptable. Quicamphol is now sold in the United States by Spicer and Company, which firm offers it "For intramuscular injection in bronchitis, pneumonia, and pulmonary infections generally." The Council declared Quicamphol (Transpulmin) unacceptable for New and Nonofficial Remedies because the claims for the value of the preparation in the treatment of lobar pneumonia, influenza, etc., are unsupported by satisfactory clinical evidence. (*Jour. A. M. A.*, November 9, 1929, p. 1471.)

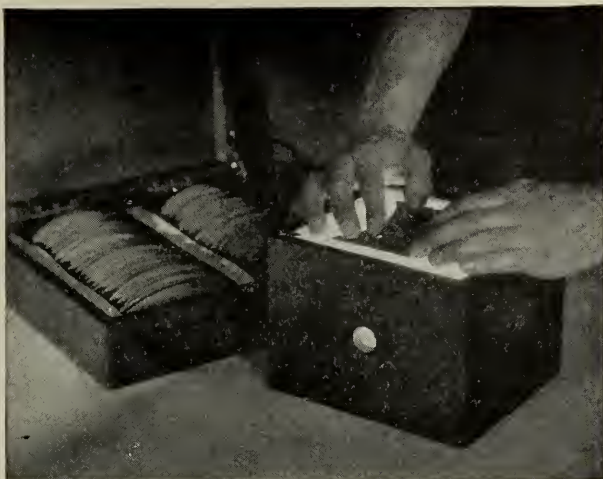
UNDULANT FEVER.—A specific treatment of undulant fever is not yet available. The use of serums has proved disappointing. Vaccines have given more encouraging results according to recent reports from the continent. In particular, an antigen prepared from dried *Brucella abortus* has seemed efficacious in a small number of cases. In this country the use of acriflavine hydrochloride has been suggested to shorten the duration of the disease. (*Jour. A. M. A.*, November 9, 1929, p. 1475.)

THE D. A. WILLIAMS QUACKERY.—The Dr. D. A. Williams Company, of East Hampton, Conn., has been operating a piece of mail-order quackery for many years. More than ten years ago the Bureau of Investigation of the American Medical Association reviewed the

(Continued on Adv. Page XX.)



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TRUTH ABOUT MEDICINES

(Continued from page 56)

history of the concern and brought out that the business had become so extensive that it had given the little village of East Hampton, with a population of less than 1,500 people, a postoffice of the second class! At the time, form-letters sent out by the D. A. Williams concern were signed, variously, "Theodore Flaacks, President," "J. M. Stearns, Manager," and, occasionally, "Dr. E. E. Williams, Medical Advisor." It was also shown that the Dr. D. A. Williams concern had made a practice of selling to letter-brokers the original letters that had been sent to it by prospective victims. It was shown, too, that the preparation sent out by the company for the alleged cure of all "uric acid troubles" was essentially a solution of potassium acetate, colored and flavored with wintergreen. Examination of a specimen sent out by the D. A. Williams concern in October, 1929, indicates that the composition of the nostrum has not changed. Recently the National Better Business Bureau investigated the concern. With the assistance of the Medical Information Bureau of the New York Academy of Medicine, four report blanks were filled out and sent to the Williams Company from different parts of the country to determine whether the company declined to sell its product to those who were suffering from serious ailments. Due to the fact that diagnosis by mail is declared to be unscientific and untrustworthy by medical authorities, pronounced symptoms were indicated. In reply a diagnosis and prescription were returned under the signature of Dr. Wilson Powell, New Haven, Conn. (*Jour. A. M. A.*, November 9, 1929, p. 1493.)

POTENCY OF ARSPHENAMINE.—There is no official standard for therapeutic potency of arspenamine preparations. According to reports of the United States Public Health Service Hygienic Laboratory, no one

brand has been definitely established as superior to others when considered from the point of view of clinical efficiency. In some foreign countries, every preparation of arspenamine and neoarsphenamine is tested on mice for therapeutic efficiency before being used. (*Jour. A. M. A.*, November 9, 1929, p. 1495.)

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the Food, Drug and Insecticide Administration of the United States Department of Agriculture which enforces the Federal Food and Drugs Act: Day's Asthma Powder (William D. Day and Company) consisting essentially of a mixture of stramonium leaves and potassium nitrate. Munyon's Grippe Remedy (The Munyon Remedy Company) consisting essentially of sugar, with a trace of arsenic. P. and R. Chlorine Bombs (The National Research Corporation) each ampule ("bomb") containing about $\frac{1}{2}$ gram of chlorine. Bronchulets (The International Laboratories) each tablet containing about 1 grain of acetanilid and $\frac{4}{10}$ grain of quinine sulphate, together with camphor and laxative plant drug extractives. Thompson's Grippe and Cold Tablets (The Owl Drug Company) each tablet containing about $\frac{1}{4}$ grain of quinine with camphor, licorice and sugar. Meyer Red Diamond Salve (The Meyer Bros. Drug Company) consisting essentially of petrolatum and wool fat, with oil of turpentine and menthol. Si-Nok (The Si-Nok Company) consisting essentially of a mineral oil containing turpentine, eucalyptus, sassafras, menthol and camphor. Eagle Menthol Inhaler (The Eagle Druggists Supply Company) each tube containing approximately $2\frac{1}{2}$ grains of menthol. Cre Sot Rub (The Drain Chemical Company) an ointment containing creosote, eucalyptol, turpentine and camphor. Nox-Mal-A (The Savodine Company) consisting essentially of epsom salt, a quinine salt and water. (*Jour. A. M. A.*, November 23, 1929, p. 1669.)



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ORIGINAL ARTICLES

THE ABOLITION OF DIABETIC COMA IN THE UNITED STATES*

ELLIOTT P. JOSLIN, M.D.

BOSTON, MASS.

Introduction. When I learn that a patient of mine has died of diabetic coma, no matter whether in Southern Brazil or Northern Canada, my conscience pricks. The patient may have been seen but once, yet the responsibility remains, because he could have been impressed with the necessity of remaining constantly under medical surveillance and of studying his own disease. Coma is preventable and the patient is the one who should know it. But, fortunately, unlike cancer, coma is curable even in the late stages.

The abolition of diabetic coma in the United States is a practical undertaking. You know only too well that this complication of diabetes is needless, that it arises through ignorance or neglect of the simplest rules of medical treatment on the part of the patient or the physician and that when it occurs recovery is almost invariable if appropriate measures are employed.

Facts prove that diabetic coma can be abolished. In the Naunyn era, ending in 1914, approximately sixty percent of von Noorden's patients and my own[‡] died of coma, but in the succeeding eight years of the Allen era of under-nutrition my own mortality fell to forty-two percent and in the larger diabetic clinics throughout the world coma had almost ceased to originate in the hospital, so effective had the dietetic treatment of diabetes become.

With the introduction of insulin, deaths from coma fell to twenty-two percent among my own 501 deaths, August, 1922,-December, 1925, and to eleven percent among the 401 deaths discovered in my series thus far since that date. Whereas all children formerly died of diabetic coma and on the average within two years of the onset of the disease, it was possible to make the statement in

July, 1928, that of 303 diabetic children under observation the preceding twenty-two months there were but six deaths. Chiefly as a result of

TABLE I.

Deaths from Diabetic Coma in Author's Group[†]

| Period | Total Deaths | Coma Deaths | |
|---------------------------------|--------------|-------------|---------|
| | | Total | Percent |
| Naunyn Era—1894-1914 | 342 | 208 | 60.8 |
| Allen Era—June, 1914-Aug., 1922 | 805 | 338 | 42.0 |
| Banting Era: | | | |
| A. Aug. 7, 1922-Dec. 31, 1925 | 501 | 110 | 21.9 |
| B. Jan. 1, 1926-to date | 401 | 45 | 11.2 |

the discovery of insulin the mortality in Massachusetts among diabetics between the ages of 20-49 has dropped from 10 per 100,000 to 5 per 100,000, and under the age of 20 years it has fallen from 4 per 100,000 to 1.6. Not a death from diabetic coma has occurred at the Children's Hospital in Boston among the twenty-one cases treated in the Banting era, and in our own last thirty-three consecutive cases there have been no deaths, all patients leaving the hospital alive. Yet the Metropolitan Life Insurance Company has reported that of 1,044 deaths from diabetes this year up to April 15, the deaths from coma were 433, or 41 percent! In the light of the foregoing statistics how can this otherwise be interpreted than ignorance or neglect of treatment by the patient or the physician prior to or during coma?

Every diabetic patient and his family must be taught what coma is and how to avoid it. They must not be allowed ignorance as an excuse for its development. Coma should never develop as a surprise, because all should know under what conditions to expect it.

Coma comes from over-eating either of food or one's own body. Over-eating of food is usually the result of breaking the diet, but not always is this true today. The modern diabetic who takes insulin is always over-eating, so far as his own capacity is concerned, and so soon as insulin is omitted he is liable to coma. Therefore, no insulin diabetic should omit insulin unless sugar free and insulin should be resumed when sugar returns. Even if the insulin diabetic takes no food, he should not omit insulin unless sugar free and

*Presented before the Section on Medicine of the Indiana State Medical Association at the annual session held in Evansville, September, 1929.

‡From the New England Deaconess Hospital, Boston.

†Statistics in process of compilation in conjunction with Metropolitan Life Insurance Company.

should be ready to resume it, if the glycosuria recurs, as demonstrated by four, six or eight-hour tests of the urine. The diabetic with fever, the diabetic with hyperthyroidism, is over-eating because his metabolism is raised. This is one of the explanations of the high mortality from coma when influenza was prevalent the early months of this year. But coma should not have been so prevalent, because with insulin at frequent intervals it could have been prevented. The over-eating may not be extreme. All of us recognize that acidosis results in children if they go long without food and drink and formerly often occurred as a result of operations. Acidosis even in normal children was a dread cause of death. Today the acidosis in normal children is anticipated or, if it develops, is dispelled by giving carbohydrate food in one form or another. So, too, with the diabetic; his acidosis may occur because he has no carbohydrate to burn and lives to excess upon protein and fat wholly apart from his diminished power to oxidize carbohydrate. It is still a sad commentary upon the inauguration of the medical treatment of diabetes that occasionally the carbohydrate in the diet is restricted sharply and the patient is given unlimited freedom in protein and fat.

Not only these reasons for the appearance of coma must be taught the patient, but he must understand what to do if any untoward symptoms arise. He should not be allowed alone to evaluate such symptoms, because they may signify many varying conditions and this is why I invariably urge and drill my patients to carry out the following rules if they fall ill: (1) Call the doctor, (2) go to bed, (3) take a hot drink every hour, (4) take an enema, (5) keep warm, (6) get a nurse or someone to care for you.

So important do I believe this education of the patient to be that I literally force it upon the patient, line upon line, precept upon precept. I use the simplest primary school methods, write the rules on the blackboard as given to me by the older patients of the class, then erase the words and make the whole class repeat the same. Only one topic takes precedence of coma or at least rivals it in the education of the diabetic and that is the prevention of gangrene and infections of the feet. The need of such prophylactic teaching is obvious, because the onset of diabetes is above forty years in two-thirds of the diabetics and thus brings them into the gangrene zone.

The dietetic treatment of diabetics and the prolongation of their durations of life interest me extremely, but there is no chance to try dietetic treatment on a dead diabetic and no matter how long he lives statistically a diabetic is always a greater asset to the doctor alive than dead.

Who Are Liable to Diabetic Coma? Youth. First and foremost the adolescent diabetic whose onset of the disease is in the second decade. In the first period of three years following the dis-

covery of insulin, 77 percent of the total deaths in my series between the ages of ten and nineteen were due to coma and even in the last period of three years the percentage is 64. Did we not know that prior to insulin all children—100 percent—who had diabetes died of coma we would find little room for encouragement. Next to the second decade in high coma mortality is the first decade with 66.7 and 60.0 percent for the two periods since the advent of insulin. The third and fourth decades, respectively, rank next, but it is gratifying that the coma percentages have dropped sharply in each and indeed in the most recent period the coma death rate for the decade 30-39 years is but slightly in excess of any subsequent decade. In the last three years I have not yet discovered a death from coma in one of my diabetics whose disease began from seventy years upwards. †Although only one-third of my patients contract diabetes under the age of forty years, this group comprises half of my coma deaths. The young diabetic is the diabetic who requires intensive education about coma.

| TABLE II. | | | | | |
|---|---------------|---------|--------------|---------|--|
| Deaths from Coma by Decades of Onset of Diabetes* | | | | | |
| Percentages of Total Deaths | | | | | |
| August 7, 1922, to Date. | | | | | |
| Decades | Aug. 7, 1922 | | Jan. 1, 1926 | | |
| | Dec. 31, 1925 | | to Date | | |
| | No. | Percent | No. | Percent | |
| 0-9 | 10 | 66.7 | 3 | 60.0 | |
| 10-19 | 23 | 76.7 | 9 | 64.4 | |
| 20-29 | 20 | 46.5 | 4 | 28.6 | |
| 30-39 | 12 | 27.2 | 5 | 11.2 | |
| 40-49 | 21 | 17.5 | 5 | 5.5 | |
| 50-59 | 13 | 9.4 | 13 | 9.7 | |
| 60-69 | 8 | 9.1 | 6 | 7.7 | |
| 70-79 | 3 | 13.6 | 0 | 0.0 | |
| 80- | 0 | 00.0 | 0 | 0.0 | |
| All ages | 110 | 21.9 | 45 | 11.2 | |
| | Total Deaths | | Total Deaths | | |
| | 501 | | 401 | | |

Second, Infections. The diabetic with an infection is prone to coma. Invariably his diabetes becomes temporarily more severe. All diabetics should understand that at such periods the urine should be tested more frequently and if necessary the insulin increased in quantity and frequency of dosage.

Third, Operations. Almost invariably operations are accompanied by an increasing severity of the diabetes, which, however, can subside quickly as convalescence proceeds. This is caused in part by the anesthetic, chloroform being directly injurious to the liver, ether next, but even occurs with spinal anesthesia. Apart from the directly harmful effect of chloroform and ether, the acidosis can be explained in large measure by the de-

†One patient recovered at 72, perhaps the oldest diabetic to have recovered from coma.

*Statistics in process of compilation in conjunction with Metropolitan Life Insurance Company.

range of the diet, the temporary with-holding of carbohydrate and the consequent compulsion of the body to live upon protein and fat—a state which always lowers the diabetic's power to utilize carbohydrate—and also the lack of muscular exercise.

Fourth. The thyroid diabetic with his increased metabolism is most susceptible to coma, yet after relief of his hyperthyroidism by operation, he becomes one of the mildest types of diabetes.

Fifth. Poor kidneys render a diabetic vulnerable.[†] Fortunately in older individuals the diabetes is so mild that acidosis seldom occurs. It was a pleasure to have one diabetic seventy years of age recover from coma, because her circulation and kidneys obviously were not perfect. Perhaps some of you have had an older patient get well, and if so, the case should be published because I believe no such instance has appeared in the literature.

Sixth. The omission of insulin, particularly in the presence of indigestion when food is withheld, has been a most fruitful source of coma. This possibility should be thwarted by instruction. Perhaps the danger of omission of food can be overcome by explaining to the patient that glycogen must always be stored in the liver or else fat will accumulate and cause acidosis and coma. For this reason I do this simple experiment before the diabetic class. Let a glass of water represent the 5 quarts (5000 c.c.) of blood in the body. Add a teaspoonful of sugar, 5 grams, the equivalent of the sugar in the total blood (5000 x 0.1%). It quickly dissolves. Explain that if the sugar is in excess, being soluble it leaks out through the kidneys, but in health that insulin from the healthy pancreas turns this to glycogen, animal starch, and stores it in the liver and muscles. To illustrate this phenomenon, add a teaspoonful of starch to another glassful of water and when the patients see the opaque mixture, they will agree that they never saw glycogen in their urine. To keep their liver full of glycogen and their urine free from sugar they must use insulin and when their urines are sugar free they can assume generally that they are safe.

Seventh. Breaking the diet is the common cause of coma, but a trained diabetic is stupid to get coma this way, because just as in an infection, so too when the diet is broken, the doses of insulin can be increased in quantity or better in frequency. The diet is broken when the patient is long without medical supervision. Be patient with your cases when diets are broken. If they don't die, as you may have prophesied, don't be like Jonah and get into a pet if Ninevah is spared and the patient lives.

Eighth. The diabetic coma patient is seldom fat. Thus far only one coma patient, I believe,

in some 118 cases since August 7, 1922, in my series at the Deaconess hospital has weighed over 140 pounds at the time of coma.

Example does even more than line upon line and precept upon precept and I always take advantage of the presence of a coma case to prove a point and at the same time to illustrate that recovery is possible if the rules are followed. I shall even venture to recount a few examples which are fresh in my mind, because they have occurred this month.

Coma and Appendicitis. Lillian, one of our children, hurt her leg and had been under her doctor's care but two or three days, when she developed pain in her abdomen and entered the Deaconess with his positive diagnosis of appendicitis. At the same time she was almost in coma, due to her omission of food and insulin. The doctor was right. The appendix was removed promptly and the next morning she was reading a book. A little longer abstinence from insulin and food, and the appendicitis might have been complicated by actual coma. Hence, when a diabetic is ill from any cause he should call his doctor and the doctor, even if he diagnosis an appendicitis or some other condition, must remember that he is also assuming the responsibility to protect the patient from the coincident appearance of coma and therefore watch the urine.

Coma and appendicitis are by no means rarely associated and this is not strange. With the onset of appendicitis the desire to eat decreases and it is good practice to withhold food in appendicitis, either in a diabetic or non-diabetic. If insulin is omitted at the same time as the food, glycosuria and acidosis will appear promptly in each patient whose pancreas has little insulin producing function left, and unless these signs are recognized at once, a state of coma may creep in and complicate the picture, which is already quite serious enough. Therefore, never omit the regular dosage of insulin unless there is close control of the condition of the urine.

Confusion between appendicitis and coma arises, because nearly always vomiting and abdominal discomfort precede coma. At the Deaconess we invariably watch for abdominal complications in every coma patient, and one must watch sharply because sensibilities are dulled and cardinal signs obscured. A patient with a gangrenous hand once developed an appendicitis in the Deaconess while under our medical and surgical observation; the appendix perforated and operation failed to save him. He also had lues. The man felt practically no pain, and so escaped our attention. I should think in at least half our coma cases consultations are held with surgical colleagues. Dr. L. S. McKittrick, who sees so many of our surgical diabetics, however, tells me that I must not say too much about abdominal pain, ush-

[†]Rabinowitch, *Canad. Med. Assoc. Jour.*, 1929, 21, 274.
Blum, Grabar, and VanCaudaert, *Presse Med.*, 1928, 1411.
Christian and Holst, *Zeitsch. f. klin. Med.*, 111, 88.

ering in coma, because by it I may lead someone to overlook an actual appendicitis.

The dangers of confusion between appendicitis and coma and of recognizing appendicitis during coma are not exaggerated. At one time in the space of a few weeks we had six such instances. Sometimes the symptoms point toward one diagnosis at the onset and at others just the opposite.

Douglas was three years old, had enlarged tonsils and was a mouth breather, still taking some of his food from a nursing bottle; he was tall and frail. Naturally the doctor, when called, saw nothing unusual in his having indigestion, and it was not until the third day of his acute, supposed digestive flare-up that the urine was tested and sugar found. The doctor brought him into the hospital with coma so severe that the CO_2 was reduced to six volumes percent. By the next morning Douglas was free from acidosis, but the family asked why did not the physician examine the urine forty-eight hours earlier and save the little creature from a grave emergency? I imagine all of us have failed to make a rectal examination as early as we should and have likewise erred in anticipating and diagnosing coma, but we must all concede that such omissions do not help our reputations. (My colleague, Dr. D. F. Jones, is only recently back from Europe and says he has not yet seen a case of cancer of the rectum under six months' duration.) If diabetic coma is to be abolished in the United States each one of us must improve our standards of medical practice. Years ago such examples were more frequent, but even today the number of diabetics whose disease is not diagnosed until they are in coma is very considerable. Remember diabetes is a chronic disease, but coma is its acute manifestation.

During pregnancy coma may occur quite readily, but is easily overcome. The pregnant woman is prone to acidosis and even if the carbohydrate in the diet is 100 grams and the glycosuria but a few grams, the reaction for diacetic acid is often positive. One need not be worried by it, however, because it yields promptly to treatment. Perhaps the mildness of the cases in recent years is to be explained by the close supervision of all pregnant women. On the other hand, the mildly diabetic pregnant woman can easily contract coma, possibly because of her vulnerable kidneys. One of our most unique coma cases this year was sent us by Dr. Kilbourne, of Groton, Massachusetts. He found her just going into coma during her seventh month of pregnancy. She soon came out and we learned that she had already had five dead babies at term and seven miscarriages. Subsequently she returned and as a result of a Cæsarean section by Dr. Titus her first living child was her thirteenth.

For the differential diagnosis between unconsciousness due to coma or due to hypoglycemia, which may be produced by insulin, deficient diet or excessive exercise, depend upon the history of

its onset. If the unconscious patient is taken off a railroad train, the cause may be diabetic coma, but if taken off a street car it is never coma. Coma comes on slowly with great indisposition, nausea, vomiting, and eventual weakness, and the coma patient will never be able to get on a street car, or if in one in a precoma state, he would be able to get off it alone, because the journey is so short. Not so with a railroad train for on that coma has time to develop, and in the old days this occurred not so very rarely when he was on his way to the doctor's care. In anticipation of the visit a patient would often go to extremes, either break his diet or restrict the carbohydrate in it to an unusual degree and as a result the remaining protein and fat would tip him into acidosis.

The coma patient has overeaten, the insulin shock patient has been long without food. The coma patient has had too little insulin, the other too much. The coma patient has polydipsia, polyuria and often abdominal pain, all of which are lacking in hypoglycemia. The Kussmaul type of respiration, the occasional acetone breath, the sugar in blood and urine, the acetone and diacetic acid, the low CO_2 in the blood, the soft eye balls, the dryness of the skin, the leucocytosis are all helpful differential points. If the urine shows sugar, when you did not expect to find it, remember it may have been long in the bladder, and test again in twenty minutes if blood reports are unavailable.

Treatment. With the diagnosis established treatment cannot be begun too soon in order that it shall not last too long. We feel free to ask to assist us temporarily two or three nurses, later one nurse, a house officer and a technician who will give up all else until recovery is assured. One of us always supervises treatment. We do not dare do otherwise.

Insulin is given subcutaneously even if intravenously as well. The dose varies from 10 to 100 units, depending upon the clinical seriousness of the case, the size and age of the patient, the duration of the diabetes. Only in cold, moribund patients with circulation so poor that absorption is questionable is insulin injected into the vein. The interval of dosage is usually half hourly at first, in a few doses becomes hourly and soon every two hours, with later administration regulated by the results of analysis of blood or urine, the latter usually to be obtained by catheter. With definite clinical improvement, and rapidly falling sugar in blood and urine, one can reduce or delay insulin and thus avoid hypoglycemia. Four hourly tests of urine for two or three days follow, and one rule is to give 15 units of insulin if the Benedict test gives a red reaction, 10 units with a yellow reaction, 5 units with a green reaction and no insulin if sugar free.

Dehydration is characteristic of coma and I understand that at the Children's Hospital many

of the symptoms of coma are considered attributable to this alone. The case is exceptional who does well without a subcutaneous injection of normal salt solution. One cannot trust to oral or rectal introduction of fluids. The veins are so small and the heart so weak that as a rule it is better to resort to the subcutaneous than to the intravenous method. Christensen and Holst are the latest to emphasize the need of salt and they cite the work of Blum, Graber and Van Caulert.

Caffein sodio-benzoate in 7½ grain doses is the best stimulant for the circulation that I know and we give it hourly, as needed, for three or four doses.

Nourishment is necessary for the coma patient, and the easiest form to give and the best borne by the stomach is carbohydrate. Fifty grams in the first twenty-four hours will suffice. So often is the digestion deranged that the greatest care must be taken with its administration. Most often now we employ ginger ale and of this two or three glasses furnish the forty or fifty grams of carbohydrate. Most ginger ale contains about eight percent carbohydrate, but I believe the Canada dry has somewhat less, perhaps six percent. If it is necessary to provide nourishment, glucose can be given by rectum or intravenously. I believe the use of glucose as practiced by surgeons today in the after-care of their patients of the greatest value, and particularly valuable for diabetics, if they do not retain food by mouth, because otherwise they would be forced to live exclusively on their own protein and fat, since their carbohydrate stores are always depleted.

The stomach is so often over-loaded at the beginning of coma and peristalsis so sluggish that it is good practice to evacuate it by the gentlest lavage. One must ever have in mind in doing this that the heart of the patient is weak.

Warmth about the patient and an enema to move the bowels complete the routine rules.

Renal block—suppression of urine—is a serious complication. It is my impression that it occurs far less frequently than when treatment was less prompt and less strenuous. To it contribute the impaired kidneys, always temporarily existent in coma, even if not permanently damaged, the impaired circulation, the marked retention of carbohydrate, which simultaneously retains water, three grams for each gram carbohydrates, indirectly due to injections of insulin, and a deficient supply of liquid, and perhaps most of all the lack of salt.

Treatment consists in persistence in the use of routine measures with perhaps an intravenous injection of glucose as a renal and cardiac stimulant. Non-protein nitrogen determinations well over 100 milligrams per 100 c.c. need not deter us from expecting recovery.

TABLE III.

Results of Treatment of Diabetic Coma
in Author's Series.

| Series | Total Cases | Total Deaths |
|--------|-------------|--------------|
| | | Percent |
| 1 | 24 | 21 |
| 2 | 28 | 14 |
| 3 | 53 | 9 |

To make such a fuss about the treatment of coma may seem to many a mistake. In a way treatment is simple, provided it is immediate and alert, and sufficient insulin, salt solution and cardiac stimulation are employed as well as gastric lavage. But coma is treacherous and the pitfalls are abundant, such as blocked kidneys, hypoglycemia, alkalosis even without the use of alkalies, undernutrition, a dilated stomach or failing heart, and all these are quite apart from the treatment of the condition which brought on the coma. Promptness in recognizing acidosis and energy in treating it make it possible to diagnose the underlying acute infection and so to give proper treatment. When delay in diagnosis is coupled with half-hearted treatment, a state of prostration is soon reached in which the diagnosis of complications is absolutely impossible. The treatment of coma is the equivalent of a major operation and after our experience with these 105 cases we still feel that we must stay by the patient whether it is day or night.

Between August 28, 1928, and September 18, 1929, thirty-two cases of coma were treated at the Deaconess without a fatality. There should be no deaths, because if complications of the diabetes existed, they should have been recognized and so well treated that the patients would not have gone into coma.

Conclusion. Diabetic coma—a medical state—easy to prevent, expensive, time consuming and difficult to treat, recovery a miracle to all beholders, but death a lasting blot upon the reputation of the patient or his physician.

DISCUSSION

C. L. RUDESILL, M.D., (Indianapolis): We have listened to another classic by Dr. Joslin, many of which he has published on diabetes. It is not my purpose to discuss his paper. I think the most serviceable thing I can do is to mention some of our Indiana problems in the prevention of diabetic coma. Everything he has said is absolutely true. The mistake we make is that we fail to carry out the many good things he has taught us. Frequently we do not get the patient soon enough, or complicating factors have arisen to prevent successful treatment. Dr. Joslin paid us an undeserved compliment in saying we had less diabetic coma than other states. He is to be congratulated on such low mortality figures (eleven percent) in his recent cases. The statistics he

quoted, as published by the Metropolitan Life Insurance Company, are a discredit to the medical profession of the United States.

In Indiana we have several problems to consider. Diabetic patients enter the hospital where we try to train them as Dr. Joslin does, although our organization is not as complete as his. They go out with renewed ambition. For a few weeks or months, they do very well. Then temptation arises; the patient receives an invitation to a luncheon or a dinner. Instead of saying "no," he goes, sits down, and eats as others do, hoping nothing will happen. Nothing does happen. Within a few days another invitation is received, then another, until finally he becomes very careless. The local doctors are in a position to help a great deal by frequent persuasion and warnings to such a patient. It seems that the poorer classes, whose education is limited, become the more careless.

Patients so often tire of running their urine tests. When they have done well for a period of time, they find sugar so infrequently that they omit the urine tests, first one day, then more days, until finally they do not examine the urine at all. Every patient should examine his urine sufficiently often to know whether he ever has sugar.

We have difficulty in getting patients to return as often as they should for observation. At first they are particular about these observations. After doing well for a period of several months, they get more careless, hence postpone their periodic observations.

Another condition we see much oftener than we should is the "over-fed" diabetic. No diabetic should be fat. Fat diabetics are very difficult to manage. They usually have hyperglycemia and glycosuria. A few years ago in a published report, Allen emphasized the danger of hyperglycemia in diabetics. Quite a number of fat diabetics have fatty deposits in the liver as well as elsewhere over their bodies. These livers are large, soft, have rounded borders. When acidosis supervenes such patients are very hard to manage. I want to call your attention to the glycogen instability in such patients. Glycogen storage is not normal in fat diabetics.

In our state some physicians still prescribe "insulin tablets." We know that insulin is not effective by mouth, never has been, and in its present form cannot be. The profession should be unusually careful in training mild diabetics. Such cases should weigh their food, carefully watch for glycosuria, and in every way keep as close a check on themselves as our insulin cases. If we can control our mild diabetics, they will have no coma. Our greatest hopes lie in keeping them "mild diabetics."

Occasionally some member of our profession will tell a patient it is unnecessary to go to the trouble to weight his food, examine his urine, and

take insulin. He will prescribe medicine to take by mouth, and tell the patient to eat "ordinary food." Less than two years ago I saw such a result in a boy of twenty or twenty-two years of age, who previously had done exceptionally well on the usual diabetic management and small doses of insulin. Within two months after this boy had discontinued his diet and insulin, he developed an extensive furunculosis, bilateral otitis media, and bilateral mastoiditis. Along with these troubles was associated a mental confusion, and later definite signs of brain abscess appeared, which condition caused his death.

Insulin must not be omitted because the patient cannot eat his meal during periods of indisposition. The average patient and some physicians have the notion that when the patient is unable to eat, insulin is dangerous. If food is not taken by mouth, the body tissues must supply it, and as metabolism must proceed from the latter source, insulin must be given. Many physicians are fearful about prescribing drugs for diabetics as they would for other patients. There is no contraindication. Drugs in diabetics are indicated for the same maladies as in non-diabetics. Fever and leucocytosis in diabetics are not as dependable as in other people. Glycosuria ordinarily is the first sign of an acute infection.

I want to mention the similarity of oncoming coma and the acute surgical abdomen. Differential diagnosis here is most important, but difficult. Coma very often is preceded by anorexia, abdominal pain, nausea, and vomiting. This may be diagnosed acute appendicitis, especially since in acidosis we so frequently find a leucocytosis. On the other hand diabetics may have acute appendicitis, which in turn precipitates coma. Not long ago I saw a diabetic in coma. She had an acute appendix that had ruptured. Her abdomen was flat, she had no pain, no fever, and hardly enough rigidity to suspect an appendicitis.

Another case in coma had an abdominal mass in McBurney's region, vomiting, a leucocyte count of 56,000. The surgeon in consultation advised waiting a few hours longer before operating. "Time," assisted by an enema, proved a help, for the mass was a fecal impaction.

The first week in August I saw three cases of diabetic coma. One patient had gone on a vacation, but left her insulin at home to avoid taking hypodermics. She developed coma. The second patient had an infected mosquito bite on his finger, and one furuncle on each arm. The infection precipitated coma. The third patient had been advised to stop her insulin and stop weighing her food. The elation of the parents soon changed to sadness when she became comatose. She was easily recovered from coma, and left the hospital a fairly mild diabetic.

We are very thankful that Dr. Joslin has

brought to our attention once more the importance of diabetic coma.

THE DIAGNOSIS OF ALLERGIC DISEASES*

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Allergy may be defined as a condition of altered reactivity, manifesting itself by characteristic symptoms when susceptible individuals are brought into contact with certain substances, usually protein in nature, which produce no symptoms in the majority of people.

It is difficult to estimate the prevalence of allergic diseases, as they are seldom fatal. However, it is probable that eight to ten percent of our population suffer from one or more forms of this condition, and the general practitioner sees, almost daily, cases belonging to this group. The whole field of clinical allergy is new. In 1912, Schloss began to apply clinically the meagre knowledge then known about this problem, and his work was soon followed by that of Goodale and Walker, working independently. Walker's reports, published in 1919 and 1920, greatly stimulated interest in this work, and knowledge has been added at a rapid rate, as evidenced by the many papers on the subject which have and are still appearing in the medical journals.

Clinically, the more common allergic diseases fall into three groups, according to the tissues principally affected:

1. The nasal mucosa group—giving rise to the familiar hay fever syndrome, *i. e.*, sneezing, profuse, watery nasal discharge, and red, itching conjunctivæ. These cases are most often seasonal, occurring during the pollinating season of the grasses and weeds. Not a few cases, however, occur perennially, and usually are due to inhalants other than pollens, the most frequent offenders being animal danders, orris root, and house dust.

2. The bronchiolar group—giving rise to spasmodic asthma, and chronic bronchitis. These may be due to a wide variety of foods and inhalants.

3. The cutaneous group—manifesting themselves as eczema and urticaria. These are most often due to foods, although a few can be traced to inhalants. The case cited elsewhere in this paper, in which horse and cow dander were proven to be the cause of eczema, is a case in point.

There are undoubtedly many other manifestations of allergy, at present little understood, which will be added to this list, as our knowledge of this important subject increases. Recent studies lend considerable basis for the belief that certain migraines, mucous colites and arthritides are due to an allergy.

There is some hope that eventually there will be isolated a fraction, common to all allergens, which, when applied to the skin, will give a characteristic reaction, and thus easily solve the question of diagnosis. Meanwhile, we must depend largely on a careful history, and the application of skin tests, with a carefully selected group of allergens, to enable us to work out these cases.

History. In the diagnosis of no group of diseases is the history more important than in those under discussion here. Hence it should be careful and searching.

Nearly one-half of allergic patients give a history of allergy in their antecedents. The stronger the hereditary factor, the earlier in life symptoms are likely to occur. Walker says that four-fifths of the asthma in infants under one year of age is allergic; two-thirds beginning in childhood is allergic; one-half in young adults. After the age of forty-five years, he believes that almost none are allergic.

In all forms of allergy it is helpful to know whether there has been seasonal variation in the attacks; whether they occurred following the ingestion of certain foods or drugs (quinine or aspirin): whether proximity to animals precipitates symptoms and the effect on symptoms of change of environment.

In asthmatics, the conditions under which the early attacks occurred are more illuminating than the history of recent attacks, since the early attacks undoubtedly were due to the true basic cause, although later attacks may be precipitated by irritants, infection, or psychic causes. It is important to know whether the early attacks followed pertussis or simple bronchitis. A past history of eczema, urticaria or hay fever is very suggestive that the patient's asthma is allergic. The age of onset of the first symptoms is important, since the exciting agent varies in frequency at different ages. Thus children are most often sensitive to foods, while adults, exhibiting symptoms for the first time, are most often sensitive to the inhalants, such as animal danders, orris, house dust and pollens.

The occupation of the patient may play a part in his case. Jewelers may become sensitive to box-wood; druggists to lycopodium, ipecac and poke-root; bakers and millers to cereal dusts. Furriers often become sensitive to the furs which they handle. Laboratory workers occasionally become hypersensitive to guinea pig and rabbit danders. Workers in dusty trades should be tested with extracts of substances which they inhale habitually. A case came to my knowledge recently of a man, working in a saw-mill, who became sensitive to the sawdust of ash, and each time ash timber was "running through" the mill he had violent attacks of asthma.

The occupations of those in close contact with the patient may be factors, since they may bring

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home on their persons amounts of allergens sufficient to provoke symptoms. Duke cites the case of a child, allergic to beef. Although the parents withheld beef and beef products from the entire household, the child continued to have symptoms at times. On further investigation, it was learned that the father, a butcher, kissed the child each evening on his return home, and transferred to him enough of the offending substance to keep up his symptoms.

Patients should be questioned regarding foods which disagree with them, or to which they have an aversion. They should be questioned closely regarding pets and animals in the home. A six-year-old child was recently seen who had been subject to asthmatic attacks almost daily since the age of eight months. The history developed the fact that this child had a pet dog which his father had brought home to him at the very time when his asthma first came on. Diagnostic skin tests were all negative, except to dog dander, and to this the patient reacted markedly. Removal of the dog from the home, and the thorough cleaning of the rugs and draperies entirely eliminated this boy's symptoms. Another patient, a woman, had large areas of eczema on her face, present since she went to live on a farm, nine years ago. Last year she spent a week in a hospital, remaining with her child, who had been taken there for an operation. During that week her eczema cleared up almost completely. On skin testing, she reacted to horse and cow danders. At our suggestion she came to the city and spent ten days with a relative. This resulted in the clearing up of her eczema. On returning home again, the eczema reappeared.

Environmental Test. This last case illustrates the value of the "environmental test." This consists merely of removing the patient from his usual environment, perhaps to a hotel or hospital, and noting the effect on his symptoms. If the symptoms improve, the obvious conclusion is that the causative allergen is something present in the home environment, and absent in the new. This test is very often most helpful. In this connection it may be pointed out that this improvement on change of environment undoubtedly explains frequently the apparent good results attributed by surgeons to tonsillectomy, appendectomy and other operative procedures so frequently done on asthmatics. If these patients are followed up, it frequently will be found that their symptoms again return when they go home to their old environment.

The intelligent patient often may aid us greatly by noting carefully the effect on his symptoms of certain foods, changes in environment, occupation, and other incidents in his daily life. Oftentimes it is helpful to have the patient keep a detailed diary, recording everything that he eats, the things he does and the places he goes. By reference to such a diary, kept over a rather long period of time,

one may often find factors which precede every attack. These will be important in working out the cause.

Skin Reactivity. Many practitioners, in attempting a diagnosis of allergic diseases, depend almost exclusively on skin tests. This is usually disappointing in results. As we have pointed out already, a careful history is by far the most valuable aid in working out these cases. Skin tests should be limited to a relatively few substances brought under suspicion by the history. In suspected food cases, diet manipulation is usually more reliable than skin tests. Skin reactivity does not run parallel with general hypersensitiveness, negative reactions being obtained at times to substances which are producing symptoms in the patient, and conversely, positive tests often may be obtained with substances that are not factors at all in the case.

Cooke's Postulates. Any substance suspected of causing allergic symptoms must fulfill certain criteria before they can be considered as serious factors in any particular case. These criteria, the postulates of Cooke, are as follows: (1) The substance must be one with which the patient comes in contact. (2) Symptoms must invariably be induced when the patient is brought into contact with this substance.

Skin Tests. In doing skin tests, we are limited, in practical work, to the cutaneous or scratch, and the intracutaneous methods. The former is the one of choice, because of its simplicity, its freedom from danger of constitutional reaction, and because commercial extracts, either powdered or liquid, may be used. For these tests, the site chosen is the flexor surface of the forearm, where twenty or thirty tests may be applied at one sitting. In infants, and in those with eczema or other eruptions on the forearms, the tests may be applied to the back. The skin is cleansed with alcohol. Using a small scalpel, cuts are made into the skin, care being taken not to go deep enough to draw blood. These cuts should be at least two cm. apart, because of the large areas of reaction so often met with in pollen sensitive patients. If fluid test extracts are to be used, they may be applied directly to the cuts. If the extracts are powdered, they are applied, in small quantity, to the cuts, a drop of deci normal sodium hydroxide being added, and the powder dissolved in it. One cut should always be left for a control, and a drop of the solvent added to it. A positive reaction will occur within thirty minutes, and is manifested by a wheal, often with pseudopodia, and an areola or redness. Positive tests should be repeated, to check their accuracy. If negative tests are obtained with substances brought under suspicion by a careful history one or more retests should be made with these substances. Furthermore, we should not discontinue our tests when we have found one substance to which the patient reacts. Patients are often sensitive to more than one substance, and will be

most benefitted by elimination of all offending materials. It should be borne in mind that skin tests should not be applied for at least several hours after the administration of adrenalin or ephedrin, as these agents may inhibit the reactivity of the skin.

Diagnosis of Pollen Sensitivity. Detection of the offending pollen or pollens is essential, if relief is to be hoped for. The pollens causing hay fever are air-borne. Rarely some of the heavy pollens, such as golden-rod, aster and corn, may cause symptoms in persons coming in close contact with them. But as a thumb-nail rule, we may say that any weed or plant which has color or smell, has developed such characteristics to attract insects, while the colorless grasses and weeds must depend on the air to transmit their pollen grains. At certain periods of the year there are countless millions of these grains in the air.

We must know not only what hay fever plants grow in our vicinity, but also the time, and the abundance, of their pollination. It will then be necessary to test out our patient only to those pollens found in his vicinity. Furthermore, we can restrict our tests to those pollens present at the time his symptoms occur.

The first pollens to make their appearance are those of the trees, the more important ones being ash, oak, hickory and box elder. Maple, elm, walnut and birch account for a few cases. These pollens usually appear about the middle of March, and some of them last until early June. Tree cases are relatively rare, the period of pollination being short, the amount of pollen relatively small, and the exposure not great, unless the contact is close. Hence, these cases are not of great importance.

The grasses follow the trees, appearing toward the latter part of May, and extending through the greater part of July. There are two hundred species of grass growing in Indiana, the most important ones being timothy, orchard grass, blue grass, and Canada blue grass. Aaron Brown has demonstrated that if a patient is sensitive to one species of a genus, he is sensitive to all. Hence it is sufficient to test out our suspected grass sensitive cases to timothy alone. English plantain is a factor at this time, too, the pollen appearing early in June and lasting until late in July. It should be borne in mind that the plantains and the grasses, while pollinating at approximately the same time, belong to two separate, distinct families, and therefore separate extracts must be used in testing and desensitizing.

Following the grasses, we come to the fall or late hay fever season dominated by the ragweeds, and here our real trouble begins. Both giant and dwarf ragweed begin to pollinate about August fifteenth, and continue until the first real frost. Here again, we find that the ragweed group is not the only offender at this season. While they are of less importance, the amaranth group (pig-

weed and spiny amaranth), the lamb's quarter are frequent offenders. Here, too, it will be found that a patient reacting to one ragweed will react to all the members of this group.

SUMMARY

In conclusion, we wish to emphasize the following points:

(1) A careful history is the most helpful aid at our command in the diagnosis of allergic diseases.

(2) Diagnostic skin tests should be limited to those substances brought under suspicion by the history.

(3) Patients may react on skin testing to substances that are not factors in the production of their symptoms. Any substance suspected of being a factor must be one with which the patient comes in contact, and must be capable of provoking symptoms when this contact is made.

(4) It is not to be understood that the diseases referred to in this paper are invariably allergic.

(5) The importance of the diagnosis of the causative factors in allergic diseases is great. Once these factors have been determined, the problem of relief for the patient is relatively simple.

CARCINOMA OF THE BLADDER*

JOHN T. SHORT, M.D.

FORT WAYNE

It is well established that a large number of bladder tumors can be eradicated by cystoscopic methods. Many, however, have been found resistant to these attacks, as well as to open operation, and the variety of treatments and the diversity of results reported indicate an unsatisfactory group. It is to this class of bladder tumors, malignant in nature, that I wish to call attention.

Tumors projecting characteristically into the interior of the bladder may be divided into three groups—benign papillomata, with uniform simple cells and structure; malignant papillomata in which individual cells are altered and disarranged but with all changes confined to the projecting tumor itself; and thirdly, papillary carcinomata, in which the cells are frankly invasive, the malignancy extending into the bladder wall. Squamous celled carcinomata, which occur less frequently, are characterized by ulceration and deep invasion rather than extensive proliferation within the bladder cavity. Other types of malignant neoplasms are too unusual to be considered here. In addition to direct extension papillary growths may spread by implantation, and recurrences, which are extremely frequent, may arise at a distance from the original and differ in form. The local condition is usually far advanced before it is possible to demonstrate metastasis, which is a less potent cause of death than renal impairment from obstruction and secondary infection.

*Read before the Surgical Section of the Indiana State Medical Association at the annual session held in Evansville, Sept. 27, 1929.

When situated at some distance from the vesical outlet a tumor may reach considerable proportions without giving rise to any symptoms whatever. Often the earliest indication is a suddenly appearing painless hematuria. This is usually startling enough to bring the patient to his physician. If the bleeding should as suddenly stop, however, the patient feeling perfectly well, is inclined to discount his former apprehension. Under such circumstances the need for adequate examination cannot be emphasized too strongly. In one patient, a man of fifty-five, the initial symptom of profuse



FIGURE 1

Air cystogram of infiltrating carcinoma in a male aged forty-seven. No section. Deep x-ray therapy was employed without improvement.

hematuria continued without the usual interruption, and during two weeks that elapsed before examination the hemoglobin was reduced to ten percent. In nearly all continued cases increased frequency of urination and pain eventually develop. If the tumor is located near the bladder neck symptoms of irritation and obstruction appear relatively early. Extensive involvement is accompanied usually by intractable cystitis, which may be aggravated by secondary infection. Sepsis, diminishing renal function and cachexia are indications of very advanced or terminal stages, a picture with which unfortunately we are too familiar.

In the diagnosis of bladder tumors the cystoscope is of greatest importance in the discovery of early stages when treatment is more promising. The presence of malignancy can be determined usually by cystoscopy alone. Possible findings favoring this diagnosis include: a multiplicity of lesions, thickening and fusion of papillæ, areas of necrosis or incrustation, surrounding areas of œdema, and marked resistance to the action of electric currents. The danger of removing portions for microscopic study is debatable, and furthermore the specimen may not be representative of the entire tumor. However, a section that does show malignant changes can be relied on, and from the architecture of the tumor and the appearance of individual cells an experienced pathologist can learn much of prognostic value. In some

cases a view of the tumor is so obscured by hemorrhage or bladder contracture that little of the exact situation will be appreciated by cystoscopy. Under such conditions stereoscopic x-ray exposure after the introduction of air into the bladder may delineate accurately the extent of large intravesical tumors. Not infrequently a characteristic induration can be palpated through the vagina or rectum, and when present is of serious import. Examination for metastasis should be carried out before deciding on radical measures, and since there is no favorite site such examination must be thorough.

Owing to variations not only in type and in extent of involvement but in the degree of malignancy shown by similar tumors in different people, the best therapeutic results should be obtained by adapting available measures to each individual. In general, infiltrating tumors are best treated by wide excision or resection, but this is often impossible. Much can be accomplished by heat in the form of the diathermy current or actual cautery. The use of radium usually is more satisfactory when combined with other forms of treatment. In the cases which I have observed x-ray therapy has been disappointing, and usually futile, although sometimes relieving pain. In many patients, unfortunately, the condition is so far advanced when discovered or the grade of malignancy so high, that unremitting efforts and the utmost vigilance are unable to keep pace with advance of the disease.

Of thirty personal cases reviewed, one-half were hopelessly advanced when first examined. Of the twenty-one varied cases in which treatment was undertaken recovery took place in nine, though not without a few remediable recurrences. Since



FIGURE 2

Air cystogram of the same patient as in Fig. 1, three months later, showing advancement in spite of intensive deep x-ray therapy.

demonstrable absence of tumor in these patients has extended from two months to four years only, this number may be reduced somewhat by further lapse in time. Of the twelve treated who did not recover, a measure of palliation was obtained in six. While this group of cases is too small and

too recent to permit conclusions, it illustrates the fact that for appreciable success with the present-day management of these conditions, vigorous and persistent attack in early stages is necessary. Early recognition usually is simple if suspects are examined. Of the 128 people who died in Indiana last year from this cause it is safe to assume that the great majority had been com-

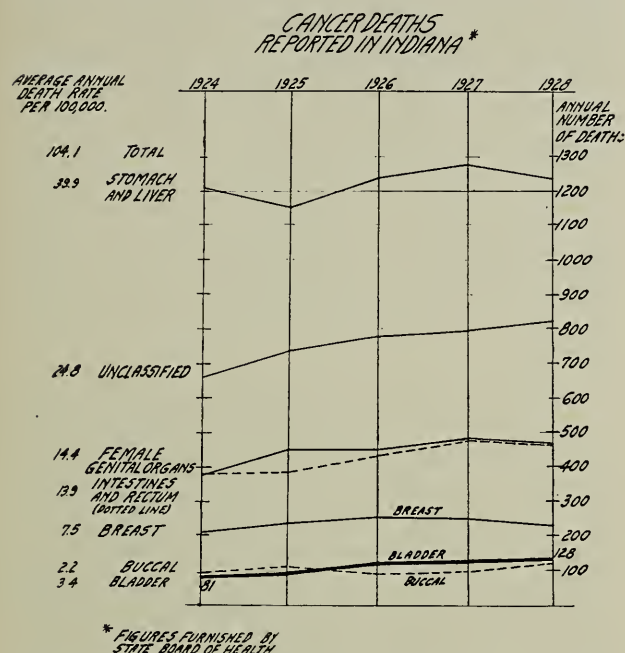
as the tumor undergoes some trauma every time the bladder contracts.

Hemorrhage is also increased by ulceration. The bleeding from the bladder tumors may be very severe, even leading to a fatal anemia. It is usually venous, but may be arterial, and the spurting vessel may be seen with the cystoscope.

For the practical purposes the diagnosis of bladder tumors is made principally by the cystoscope. Not only in the detection of tumors but in the determination of the features upon which the type of treatment to be used depends, and in the observation of the response to treatment, we rely largely on this instrument. It is in the detection of infiltrating growth that it may fail, and here rectal or vaginal examination is most important.

ROBERT ACRE, M.D., (Evansville): The most important factor in cancer of the bladder, as in cancer in any other location in the body, is an early diagnosis. It is surprising how many patients of average intelligence, or far above average intelligence, will have repeated gross hemorrhage which may be of short duration but repeated over months without consulting a physician. It is usually only those cases which have continual gross hematuria for a period of several days in succession that seek the advice of their doctor. Also, we must admit here that many physicians themselves often neglect or underestimate the importance of the appearance repeatedly of red blood cells in the urine.

As an example of what I have said I wish to mention an instance where a very prominent local druggist had repeated hemorrhage from the blad-



pelled to endure a more or less protracted period of extreme suffering and disability. This subject is presented with the hope of stimulating further interest in the early diagnosis, treatment, and subsequent supervision of this truly distressing condition.

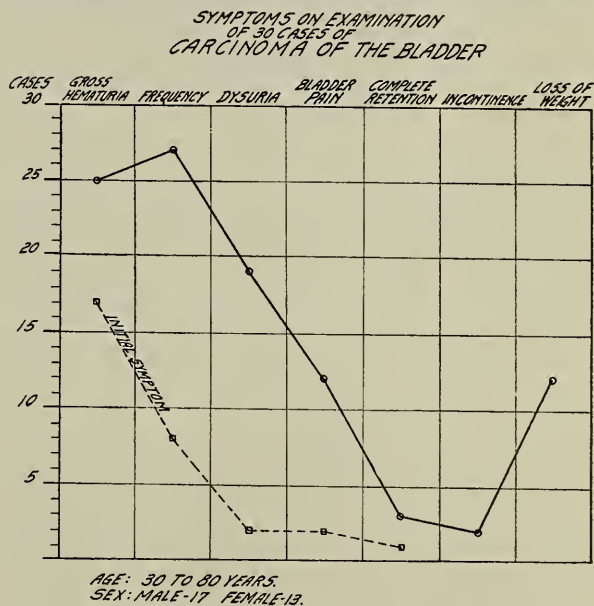
DISCUSSION

C. L. BOCK, M.D., (Muncie): The type of cases presented in Dr. Short's paper in the main represent a group the end results of which are very unsatisfactory, as far as treatment is concerned. Most of them are so far advanced that no matter what treatment is instituted the larger percentage die, either of urinary sepsis or metastasis.

The importance of early diagnosis should be emphasized, since possibly a large percentage of bladder tumors are in the beginning benign, or at least low grade in malignancy.

Bladder tumor occurs in far greater frequency in the region of the trigone and ureteral orifices. Occasionally tumors remote from this area may reach such proportions and the bladder wall so infiltrated that they are hopeless as far as treatment is concerned, and yet produce no symptoms. In this case early diagnosis is, of course, impossible.

Hemorrhage is characteristic of bladder tumors practically without exception. The vessels developing in tumors are all of the capillary type, and very thin walled even when of abnormally large caliber. Rupture of such vessels is easy, especially



der for three months before consulting any physician. He was well acquainted with the majority of the physicians locally and could easily have had the best medical care available. Finally, after being referred to a urologist he refused for six to eight months to submit to a thorough cystoscopic examination. A rather large carcinoma of the

papillary type was found at the first examination.

As the speaker has mentioned, the treatment of cancer of the bladder varies greatly according to the location, type of growth, and the stage it has reached when the diagnosis is made. Really at this day and age with all the propaganda going on for the early diagnosis and prevention of cancer, very few cases presenting themselves for treatment for tumor of the bladder should never be so far advanced that they could not be treated through the cystoscope. I refer here especially to the non-infiltrating papillary type.

FRANK S. CROCKETT, M.D., (Lafayette): I think a point that we should add to Dr. Acre's discussion is that of early diagnosis. Each one of these cases comes in with a history of repeated hemorrhages of some amount. They consult the family doctor and the bleeding stops and they often wait. If we see one of these cases come in with a hopeless condition, we feel badly then because that patient should have had earlier care or earlier diagnosis. If the growth is located on the anterior superior portion of the bladder you may be safe to remove the tumor but if it is located on the lower portion it becomes very difficult, if not impossible, to remove. However, we can increase that patient's comfort and sometimes cure for quite a while by diathermy. There is a diathermy and that is short of burning and acts as cautery by drying out the tissues. Usually diathermy will give some benefit by lessening the pain of the patient.

THE INFLUENCE OF ACCESSORY SINUS DISEASE ON GENERAL SYSTEMIC DISTURBANCES*

M. RAVDIN, M.D.,
EVANSVILLE

The late Dr. Alfred Williams Momerie, a brilliant Cambridge scholar, once said, "Always remember that it is extremely easy to make simple things complicated and extremely difficult to make complicated things appear easy." Keeping his admonition in mind while writing this paper, I purposely avoided complicated theories and difficult problems. I merely wish to talk to you as I would if we met in your library or mine for a little rest and friendly chat.

Ever since the doctrine of focal infection came into general recognition, many American investigators have claimed that certain constitutional disorders, especially in children, apparently have been caused by suppurating paranasal sinuses. Conspicuous in this comparatively new field of clinical research is Dean, of Iowa City, now of St. Louis. He was ably assisted in his investigations by Byfield and Jean, of the pediatric division of the University of Iowa. Dean reports numerous pathologic conditions in children asso-

ciated with paranasal sinus disease which cleared up by removing the sinus pathology. Among these conditions Dean enumerates phlyctenular conjunctivitis, which was thought to have a tuberculous basis; iritis and choroiditis, which were in the main ascribed to lues, and retrobulbar neuritis in the adult, about which the majority of observers agree as to its being caused by suppuration of a posterior ethmoid cell or cells. Dean further points to the interdependence between chronic multiple infectious arthritis and sinus disease in children. He and his associates also believe that the genesis of asthma in children is due to the absorption of bacterial protein from an infected sinus because the little patients are benefited greatly by the treatment of the sinus infection. Pharyngitis, tracheo-laryngitis and bronchitis may often be the end results of paranasal suppuration or at least be influenced by the sinusitis in their tendency to chronicity.

Gottlieb, as cited by Gatewood, suggests four possible ways by which the symptom complex called asthma may be produced through nasal disease: (1) Mucopurulent material may drip into the pharynx from infected sinuses and the infection gradually involve the mucous membrane of the larynx, trachea and bronchi; (2) Mucopurulent material may be retained in a sinus and the toxic products be absorbed through the blood stream or lymphatics or both and produce allergic phenomena that may manifest themselves in asthma; (3) the nose may be obstructed by polypi and hypertrophied turbinates. The patient is compelled to breathe through the mouth and the effect of cold inspired dry air combined with the presence of infected material on the sensitive mucous membrane of the trachea and bronchi conceivably may be the exciting factor in the production of bronchial asthma. (4) Finally a spasm of the musculature of the bronchi may be produced through nerve reflex by irritation or disease of the sphenopalatine or nasal ganglion. Sluder explains the genesis of asthma of nasal origin by stating that the path of impulses is from the nasal ganglion through the vedian, upper, middle and lower cervical and first thoracic ganglia, through the last two of which pass the accelerator fibres for the heart and the vaso-motor fibres for the lungs.

Gottlieb reports 31 cases of asthma in 117 carefully studied cases of paranasal sinus disease. Kern and Schenck call attention to the high percentage of asthmatics showing x-ray evidence of sinus disease. In a total of 200 asthmatics examined at the medical and otolaryngologic divisions of the University of Pennsylvania Hospital, 161, or eighty percent, showed positive sinus disease by x-ray, and 134, or sixty-seven percent, showed positive sinus disease by clinical examination.

Finkelstein, of Germany, after several years of study in a large children's hospital, corroborates

*Presented before the General Meeting of the Indiana State Medical Association at the annual session held in Evansville, September, 1929.

some of the observations of American investigators. Finkelstein gives a pathognomonic sign of ethmoiditis in children, namely, a livid œdema of the upper and lower eye lids resembling a severe conjunctivitis, but the conjunctiva in this instance is not involved.

Sinus disease when associated with coughing in tuberculosis and allied pathology is another interesting topic for discussion. From time immemorial cough has been the nightmare of medical men. More than fifty percent of narcotics of the opium group is used up in the attempt to stop a cough. "Cough is Nature's effort to rid the lower respiratory tract of accumulated irritating material." The chief etiologic factors in chronic cough, according to Williams, are, first, pulmonary infiltrations and thickening with or without enlarged root glands often following pneumonia and influenza; second, enlarged bronchial root glands, peribronchial thickening and bronchiectasis. When we consider that the majority of bronchiectatic patients also have infections of the upper respiratory tract we can realize readily why so many patients go on coughing until the nose and sinuses are cleared of infectious material which keep up the bronchial and tracheal irritation. In cases where the sputum is free of bacilli, where x-ray and physical findings are negative, the patient's accessory sinuses should be investigated by a competent nose and throat specialist. It is surprising how quickly the cough disappears after the sinuses are cleaned out. The original lung and bronchial pathology at once becomes more amenable to treatment.

The Accessory Sinuses and the Heart. "Ever since the infective character of endocarditis has been recognized and studied by Winge, Koster, Koch, and others, the medical world," says Spielberg, "has been on the lookout for the portals of entry of the infection and the source or foci of infection." The consensus of opinion seems to be that suppurating paranasal sinuses chiefly are responsible for the development not only of endocarditis but for acute nephritis, the so-called rheumatic fever, and arthritis as well. Osler refers to the suppurative diseases of the paranasal sinuses as primary foci of infection in the etiology of acute valvular heart disease, but he believes that the tonsils take first rank as sources of infection. Faulkner, as cited by Spielberg, points to the paranasal sinuses as frequent foci of infection, far more frequent than the profession realizes. He rightly says "that there is no part of the human body where a focus of infection may be so securely hidden from observation" as the paranasal sinuses. He further states that positive blood cultures can be obtained in many cases of acute sinusitis. One observer reports three fatal cardiac cases where necropsy disclosed an empyema of one or both maxillary sinuses that was not detected during life. However, Spielberg, from

a rich experience in private and clinic cases which were examined and studied with every aid at his command, found but few cases of cardiac disease associated with sinus disease where the sinus infection appeared to be responsible directly for the cardiac pathology. Personally, in an experience of many years, I have seen many cases with suppurative sinusitis where there was not the slightest suggestion of heart disease as reported to me by a competent cardiologist. However, there is no doubt in my mind that the influence of sinus disease on cardiopathies is not to be underestimated and that no examination of a patient with sinus disease is complete without a survey of the condition of the heart. Internists also should not consider the examination of cardiac cases complete without a survey of the paranasal sinuses.

The Accessory Sinuses and the Brain. Acute and chronic paranasal sinus infection sometimes present cranial symptoms, the severity of which are out of proportion to the sinus infection. Faulkner mentions a case of meningitis with streptococci in the spinal fluid. Recovery took place after a radical operation on the infected paranasal sinuses. Looper, of Baltimore, reports a group of very interesting cases of sinus disease with cranial symptoms. Most of his patients "have been sent into the hospital with suspected intra-cranial lesions, new growths or organic mental disturbances. The most thorough examination failed to reveal any other cause for the trouble except sinus infection, and after treatment or operation on the sinuses the symptoms cleared up." Time will not permit me to cite some of his interesting cases, and I advise you to read his original paper in the June, 1928, number of the *Annals of Otology, Rhinology, and Laryngology*.

Adam Jones, in the *British Medical Journal*, reports two cases of sinus disease with mental symptoms. Jones is unwilling to admit that the mental symptoms were caused by the sinus pathology, but he thinks that the affected sinuses had a deleterious influence on the mental disorder. In our own practice we had a patient who was admitted to the Walker Hospital with some of the symptoms of brain tumor as headaches, dizziness and vomiting. The ophthalmoscope showed a blurring of the outlines of the optic discs, not true choking. X-ray pictures taken from this patient showed infected ethmoids and sphenoids. Operation and drainage resulted in a speedy recovery.

It must be borne in mind that the sinuses are anatomically closely related to the brain and that there is an intimate anastomosis between the blood supply of the sinuses and the cranial structures, so that a small amount of toxin from a low grade sinus infection is sufficient to produce alarming mental symptoms if carried to some vital center. The sphenoid sinuses in particular are in close

relation to vital intra-cranial structures, as the ganglion of Gasserius, the pituitary body, chiasm, and optic nerves, also abducens, oculomotor, trochlear, ophthalmic, and the maxillary nerves, the cavernous sinuses, the internal carotid arteries and the dura of the middle fossa.

The Sinuses and the Eye. Those of us who combine ophthalmic and otolaryngologic practice very often see patients with diseases of the eye lasting weeks uninfluenced by classical treatment, until an x-ray picture and clinical examination discloses sinus pathology. When the diseased sinus or sinuses are drained and ventilated the eye recovers in a short time. I have in mind a patient with luetic irido-cyclitis as proved by a four-plus Wassermann. Uninfluenced by salvarsan, the mercurials and iodides and classical local treatment, the iritis progressed until there was only perception of light. When an x-ray photograph was taken it suggested an infection in the ethmoid cells on the side of the iritis, though clinically there was no evidence in the nose. When the ethmoid cells were drained the iritis rapidly subsided and the vision was restored to almost normal. I can cite numerous similar cases, but this one I believe will suffice.

The Accessory Sinuses and Gastric Ulcer. That a patient may swallow with impunity quantities of pus teeming with pyogenic organisms is certain. The normal acid gastric juice seems to act as an effective antiseptic barrier. If the mass infection is continued over a long period of time it frequently results in gastritis with hypochlorhydria. The avenues for infection are no longer guarded and there may result erosions of the gastric mucosa. Again infection of the submucosa through the blood or lymph stream or both must be borne in mind.

Watson Williams in a highly instructive paper in the *British Medical Journal* of June 2, 1928, discussing the entire subject *in extenso* urges the importance of nasal infection as a factor not only in gastric and duodenal ulcer but in appendicitis as well. An analysis of ninety consecutive cases of sinusitis of his own showed that fourteen had undergone appendectomy, two had operation for duodenal ulcer, and two patients had gastric ulcer. In support of his thesis that sinusitis must be reckoned among the primary sources of gastric and duodenal ulcer, cholecystitis and appendicitis, Watson Williams cites the opinion of British internists and general surgeons such as Burgess, Professor Wilkie, Bennett, etc. Burgess especially emphasizes the importance of a careful search for the focus of infection in the teeth, tonsils and accessory sinuses before operation.

In our own practice we had a patient with a diagnosis of gastric ulcer made by two very competent men who apparently recovered after a chronic antrum suppuration was drained. I say

apparently, because I have no other proof except the patient's freedom from all gastric disturbances.

Dr. S. M. Street, a general surgeon of Vicksburg, Mississippi, in a paper read before the Mississippi State Medical Association, has this to say on our subject: "I am convinced that far too many general practitioners and surgeons are not on the alert for symptoms of sinus disease and pay too little attention to the nose and throat, thus overlooking many cases that could get prompt relief from distressing symptoms by conservative sinus surgery, and these cases are often treated for years without results because the symptoms are attributed wrongly to other causes. I also am convinced that an equal number of cases are operated on by the nose and throat men for symptoms attributed to sinus disease but which are due to other causes." He further says that it is essential for the specialist and general surgeon and internist to work together, and that no case should be operated on until after a careful and thorough examination by all concerned. Coming from a general surgeon, it is very gratifying, and very true indeed.

Summary. (1) The deleterious influence of accessory sinus disease on general systemic disturbances is proved by the observation of many competent investigators in this country as well as in Europe. (2) That cardiac disease and especially endocarditis may be due directly to accessory sinus disease requires more observation and research. (3) That accessory sinus disease is responsible for a certain percentage of gastro-intestinal disturbances and gastric and duodenal ulcer is the opinion of very competent observers in Great Britain. (4) That accessory sinus disease exercises a direct deleterious influence on disease of the eye is no longer a theory. (5) A competent roentgenologist is indispensable in the make-up of a modern team for the practice of medicine and surgery. (6) The close cooperation or team work of ophthalmic surgeons, nose and throat specialists, internists and pediatricists, and general surgeons is very desirable from the standpoint of the patient as well as of the medical profession.

If medical men will think and reason together, if we will whole-heartedly cooperate in real team work, there will be fewer failures in diagnosis, and a more scientific medical and surgical therapy. Let us not forget that the science of medicine and the art of surgery is too heavy a load for one man to carry, and that by intelligent cooperation great battles have been won, mountains have been moved and deserts converted into blossoming fields. Let us forget yesterday's methods which lost the battle for us. We live in the world of today, with new problems to solve, new by-paths to explore and new research to enrich our minds. There should be no sense of finality among us. The pages of

yesterday are all written up. The pages of today and tomorrow's achievements are still clean and ready to receive the records of a new endeavor.

A SERIOUS MEDICAL PROBLEM*

M. A. AUSTIN, M.D.
ANDERSON

Recently in New York City a meeting was called by the superintendents of the various hospitals to consider the problem of financing the care of the accident cases rushed daily to the hospitals and from whom in not over fifteen percent was it possible to secure any remuneration for hospital, medical or surgical care. City hospitals do not fully serve the purpose because patients usually are rushed to the nearest place. In Anderson the same situation now is presenting a problem of the most serious sort, since the hospital here is being filled up with these no-pay patients, mostly automobile accident cases, and making it necessary for pay patients to take more expensive rooms, or wait for ward accommodations to be vacated. In the past month two of my patients who were limited in their finances for necessary surgical work had to wait five and seven days, respectively, before a bed in a ward could be secured, and at the present time patients are waiting admission because they wish to pay a minimum hospital rate. These patients are honest and have the money to pay, but are being kept out by patients who are paying nothing and probably will not pay anything. Dr. Tracy informs me he does not receive enough from the x-ray fees of his automobile accidents to pay for his films, and that his estimate is that ninety percent of these patients pay nothing. To check up the matter definitely, the Sisters at the hospital have furnished me with figures that show that seventy percent of all accident cases they have cared for have paid nothing, and over eighty percent of the automobile accidents pay nothing to them or the doctor. As a result of this they have been so handicapped in their finances that proper help could not be secured, and in order to save on laundry expense, the sisters have been getting up at two o'clock in the morning, and doing the laundry work before they begin their regular day's work. How many of the people that have been cared for at the hospital would get up at this time of the night and do a washing for anyone who would not even pay them for it? It has reached a point where charity has become an imposition. Cases certified by the township trustees pay \$10.50 a week, but the city and county are paying nothing. And if eighty percent of the people really are entitled to charity then the city or county should pay the bills, or let the people be taken care of in their own homes.

In addition to the hospital problem, the physi-

cians have found it necessary to decide for themselves whether they should work themselves physically and financially bankrupt, in the care of families who have all the luxuries of the day, but nothing to pay their physician. They say they cannot pay us and keep up their payments on their automobiles, radios, electric household appliances, furniture, and possibly a house in which they are living and paying the equivalent of twice the rent they actually can afford. These people pay for a year on their luxuries, and a slump throws one of the family out of work and repossession occurs, and when these people lose the stuff they have paid a considerable amount on, they become the worst Bolsheviks in the community. I have interviewed a number of these people and they have damned their employer for shutting up his plant, the owner of their residence for putting them out when their rent is not paid, and all the firms who have had to take back the various installment purchases. So-called "big business," with high pressure methods and advertising, has been persuading these people that they "can afford anything," the same as the Florida real estate agents sold their land as long as they could find suckers to buy it. In the present industrial slump it is the holder of financial paper who must expect to be the goat, for none of the paper has any greater value than the second hand value of the article disposed of on time payments.

Having an intimate knowledge of medical economic problems from many contacts in Indiana and elsewhere, I can say it is the same all over the country, and I also can say that the entire medical profession is resenting the abuses of their time, services and charity. A man with an automobile, radio, and all the other things people have nowadays, is not entitled to charity as an indigent, and if the physician is going to give his time and services and worry with these families, he is doing so not only at an expense to himself but to the actual disadvantage of those who do pay him for their services. An overworked doctor hasn't time to give his patients the examinations they require. Many people are calling a physician and paying him for one call but never pay for anything afterward. Many people think a physician has to answer a call any time he receives one. That is not so. No physician has to give his services to anyone, and even if offered pay in advance he does not have to respond to any call unless he so desires. Also no physician is obliged to continue to attend any patient whom he does not care to attend, even after he has been in attendance upon them. He has the same right to dismiss himself from an unsatisfactory patient as the patient has a right to dismiss his doctor and call some other physician. Families moving into a new community should think enough of the possible need of a physician in an emergency to call upon a good physician and make his acquaintance. The people

*Presented before the Madison County Medical Society at its December, 1929, meeting.

who do this can be assured of service unless they impose upon the physician financially.

The average physician has a \$20,000 investment in his education. More than that if his time value were considered in the cost to include what he might have earned during the eight years in college and hospital. That would earn \$100 a month interest without any work on his part of any kind. If he does not make enough to pay this interest charge every month, and at least a thousand dollars a year more to apply on replacing the cost of his education, his time had better be spent in some other work than medicine.

Making calls upon people whom we do not know, and taking chances on payment if ever paid, is a foolish thing to do if one has an established practice and regular office hours. A physician who makes a night call and gets paid for it loses something the money cannot pay for—his rest—and he lessens his efficiency the next day, but every physician feels obligated to attend those families who appreciate his services as they should, whenever they may need him day or night.

Physicians and hospitals always have given so much of their services to charity that far too many people are thinking they have no reason to feel obligated to pay us, but with our increasing expenses we have reached a time when the demands upon us are too great a burden for us to carry. Our generosity has been imposed upon so greatly that we can do no less than, as many physicians are now doing, refuse to answer calls save where we know the family. The cost of medical care does not average more than one week's wages per year per family, and no family budget is so impoverished but that they could pay this amount if they did not feel they could get a physician and pay him when and if they desire to do so. People are not saving anything for these emergencies, because they are induced to spend not only all they are making but have mortgaged their incomes for a year in advance. Putting medical, surgical and hospital services on a cash basis for a time would do more than all else to teach the necessity of thrift, and the satisfaction of a savings account to depend upon when work gets slack, or the wage earner is sick or injured, and would work wonders in the solution of our economic problem. This does not apply to a large number of worthy families of limited means whom we know are honest when they are working and have the money to pay us, for they do pay when they can. But I believe that it is time for us to get back of the Physicians' Exchange. This means giving the Exchange a list of all our delinquent families, and before making any call upon a new family, unless recommended by someone we know, we should get a report from the Physicians' Exchange as to the record of that family's delinquencies. If we all do this, then we can get and keep the respect which we seemed to lose in doing the amount of work we have been doing without any financial reward or even thanks.

We all are willing to do our share of charity work, but under the present system we are doing too much unnecessary free work and in consequence we are aiding in the establishment of dependency and pauperism.

THE FISH TAPEWORM AND ITS OCCURRENCE IN INDIANA*

MARCUS WARD LYON, JR., M.D.

SOUTH BEND

The interest taken in the subject of fish tapeworm infestation is shown in the list of references which includes no less than nineteen articles or notes that have appeared on the subject in the past two years. As two native cases of fish tapeworm infestation already have been reported for Indiana and what appears to be a third case is here recorded, it may prove of interest to zoologists and physicians to discuss this parasite and its occurrence in this state.

The fish tapeworm, *Diphyllobothrium latum*, is a large intestinal parasite for which the following mammals have been found as the definitive host: Man, *Homo sapiens*; dog, *Canis familiaris*; South American dog, *Canis azarae*; red fox, *Vulpes vulpes*; Arctic fox, *V. lagopus*; gray fox, *Urocyon cinereoargenteus*; cat, *Felis domestica*; puma, *F. concolor*; jaguar, *F. onca*; lion, *F. leo*; leopard, *F. pardus*; other species of cats, *F. macroura*, *F. mellivora*, *F. mitis*, *F. tigrina*; mongoose, *Herpestes albicaudus*; ratel, *Mellivora ratel*; raccoon, *Procyon lotor*; polar bear, *Ursus maritimus*; seal, *Cystophora cristata*, *Monachus albiventer*, *Phoca barbata*, *P. hispida*, *P. vitulina*; porpoise, *Phocaena phocaena*. (Price, personal communication); bears, species not stated (Ward 1926, 1927). Probably some of these mammals acquired their infestations while in captivity.

In man it attains the average length of two to nine meters, but may reach exceptionally fifteen or twenty meters. It is composed of 3,000 to 4,000 segments or proglottids, the fully mature ones of which are decidedly broader than long. Because of this fact as well as because it is often broader than the two other large tapeworms of man, *Taenia solium* and *T. saginata*, it is sometimes called the broad tapeworm. In the center of each segment is a rosette-shaped uterus rendered dark by an accumulation of eggs. The head is one to five millimeters long, club or almond-shaped, and contains two longitudinal grooves or bothria, by means of which the animal attaches itself to its host's intestines. The neck varies in length, eight or more millimeters, and is 0.33 to 0.6 mm. wide. Thence the worm increases in width so that fully grown specimens are 10 to 24 mm. wide; the length of an individual mature segment is 3.5 mm. The segments toward the end of the worm become square in shape, measuring 4x4

*Read at the Richmond meeting of the Indiana Academy of Science, December 6, 1929.

to 6 x 6 mm. All parts of the worm are in general smaller in young individuals and the segments are more square than in old worms. Such immature specimens were described originally as another species, *Diphyllbothrium parvum* Stephens. Young individuals possess a peculiar terminal segment characterized by an infolding and a knob at its posterior end, resembling the posterior end of the larval form of the worm. After this segment together with many of the others sloughs off, the worm may be said to become mature and assumes larger and wider proportions. Every month or so additional strings of segments varying in length from 0.5 to 1.5 meters are sloughed off and passed by the host (Magath 1929).

The fish tapeworm is of unusual interest because after the eggs are laid, two intermediate hosts are required for development. The eggs are oval, range in size from 52 to 76 microns in length by 36 to 52 microns in width, and have an operculum at one end. Large numbers of eggs are set free when portions of the worm are passed with feces and ova are liberated continually in the intestine of the definitive host. In a normal stool it has been estimated as many as 800,000 ova were present (Lyon, 1926).

The ova on reaching water slowly develop into hexacanth embryos and then into free-swimming ciliated forms, termed onchospheres, at the end of ten to fourteen days. These are ingested by some species of copepod in the body of which they grow into the proceroid stage, a minute, thick, unsegmented worm-like body 0.55 mm. in length, by the end of two weeks (Essex, 1927). *Diaptomus oregonensis* is the only species so far found in North America serving as the first intermediate host. In Europe, Janicki and Rosen, 1917, found *Cyclops strenuus* to be a first intermediate host, a species rare in the United States.

The wall-eyed pike, *Stizostedion vitreum*; sand pike, *S. canadense-griseum*; Great Northern pike, *Esox lucius*; and Burbot, *Lota maculosa*, have been found to serve as the second intermediate host in North America, particularly the wall-eyed and Great Northern pikes (Magath, 1927, August; Vergeer, 1928, March). In the Old World other species of fishes have been found to be the second intermediate host. The larval forms from the copepods penetrate the alimentary tract of the host fish and come to rest in an unencysted state in the muscles and viscera. Here they are known as plerocercoids. The large fishes which serve as food for man and other piscivorous mammals become infested by eating the smaller plankton-feeding fishes which contain infested copepods in their digestive tracts or mature embryos already in their muscles and viscera. Hobmaier, 1927, has shown that plerocercoids ingested by larger suitable host fishes remain living plerocercoids in them migrating to muscles and viscera. Whether plerocercoids can reproduce asexually is unknown. The plerocercoids vary from three to twenty mm.

in length and from 0.5 to 1.5 mm. in width. The anterior end bears the bothria characteristic of the adult worm, the posterior end is "tucked in". They usually are coiled on themselves. Magath, in 1927, was first in this country to feed such embryos to dogs and recover adult worms. His plerocercoids were obtained from wall-eyed and Great Northern pike. Out of thirty-four larvae fed to twelve dogs he recovered twenty-seven worms, twelve being typical *Diphyllbothrium latum*, and fifteen being the immature form previously known as *D. parvum*. Vergeer, March, 1928, confirmed these experiments. In the same year, December, he raised unusually large worms by feeding plerocercoids to bears. In the experimental animals the plerocercoids develop into egg-laying worms in about three weeks. Two or three weeks additional are required for the worm to slough off its terminal and adjacent segments and become fully mature.

Man becomes infested by feeding intentionally, as in the case of Finns, or accidentally, as in the case of Jewish women and children, on uncooked fish. According to Magath (1929), raw fish is a favorite food with Finns, both at home and in this country. The incidence of infestation in Finland is very high and it is to Finnish immigrants in all probability that the three endemic centers in North America have become established. Infestation in the Finns is found equally in both sexes. In studying the reported cases in North America, one is struck by the large number occurring in Jewish women and young children, rarely in Jewish men. Barron, 1929, points out that this comes about by the Jewish women preparing a dish of fish chopped up with onions and other seasoning, known as "gefuellte Fisch." It is the custom of most Jewish housewives to taste this in the uncooked state to learn if it is seasoned properly. Children playing about the kitchen probably do the same. The finished dish is well cooked, so that the men in the family escape infestation. The natural length of life of the worm is thought not to exceed fifteen years (Fantham, Stephens and Theobald). More than one worm may be present in the same host at the same time.

The life cycle of the fish tapeworm is kept up by the contamination of lakes and possibly slow flowing rivers by human excreta through sewage or nearby out-houses (Magath, 1929). Infestation once established may be continued by domestic or wild piscivorous mammals, dog, wolf, coyote, cat, lynx, bear and larger mustelids (Ward, 1927; Vergeer, 1928). Whether the parasite is primarily one of man and later adapted itself to other mammals is not known. Probably it was originally a parasite of the naturally piscivorous mammals and subsequently adapted itself to the human host, such as the ancient Lake Dwellers of Switzerland.

Primarily the fish tapeworm is an inhabitant of the Old World: northern Sweden, Lapland, Baltic shores of Russia, northern Germany, Denmark,

Finland, where on account of the habit of eating raw fish it is very prevalent, Holland and Belgium, rare, Switzerland, portions of France and Italy bordering on Switzerland, Roumania, Ireland, Madagascar, Lake N'gami in South Africa, Turkestan, Japan, Philippine Islands (Brumpt). The worm was first noticed in North America in 1879 in a young adult male, native of Sweden, resident in Pennsylvania three months (Leidy, Walker). Since that time about 200 instances, mostly in immigrants, have been recorded in the literature, but about twenty of these were infestations acquired by native-born persons. The first undoubted native case was reported from Minnesota, in 1906, but the earliest record of the fish tapeworm which might have been acquired in the United States is given in a letter published in the *Medical Times*, N. Y., 83, 1903, pp. 517-518, from Dr. Horace M. Bellows of Huntington Valley, Pennsylvania, to Dr. William N. Berkeley. In this letter Dr. Bellows states that in 1894 he treated a young lady for infestation with *D. latum*. Of this he remarks, "The lady does not have the least idea where she obtained it. Was in Europe several years before, and a tour of Egypt and the Holy Land was taken several years after she passed it. She cannot tell how long she was afflicted with it, but I do not suppose she obtained it in Europe, being so long before she passed any segments." Apparently the lady had been passing segments for about a week before being treated. Whether this can be regarded as a native case or not is difficult to determine. (Price, personal communication.)

In North America there are three centers of infestation, Ely and vicinity, Minnesota (Magath, 1927, 1929), the northern peninsula of Michigan (Vergeer, 1928, March), the large lakes of Canada, about Winnipeg (Magath, 1927, 1929; Vergeer, 1928, May, July, 1929; Nicholson, 1928). Into these regions of North America the worm apparently was brought and its propagation continued by the immigrant Finns and possibly by immigrant Jews from northern Europe.

The worm is unknown in South America and Australia except in immigrants.

In Indiana the fish tapeworm has been reported previously three times, two of the three instances originating in the state. A fourth instance is reported in this communication, probably also a native case. These four instances are:

1. (Lyon, 1920). Host, Russian Jew, male of thirty-nine years, born in Poland, served in the Russian army during the war between Russia and Japan, has been many places in Siberia. He knew that while away from home he had eaten uncooked fish. Had lived in the United States five years before he noticed he had a tapeworm and eight years later had the worm expelled. This worm undoubtedly was imported into this country. During the last six years of the life of this worm, the

host lived in South Bend. Millions of eggs passed by sewage into the St. Joseph River, and thence to Lake Michigan.

2. (Wallace and Grant, 1922). Host, woman of twenty-five years, living at Fort Wayne, German parentage, born in Decatur, Indiana. "Has occasionally eaten a little raw fish as well as cooked fish. Her father occasionally received whitefish, bass and pickerel from Sandusky, Ohio." The inference is the fish may have come from Lake Erie. Of the fish mentioned the pickerel is the only undoubted intermediate host. This is the first native Indiana record of the fish tapeworm and the eighth native record for North America.

3. (Lyon, 1926). Host, Jewish boy of four years, never farther away from South Bend than the nearby city of Dowagiac, Michigan. Worm probably about two years old, and most certainly acquired by the child while playing about the kitchen. The stools of this boy's mother, aunt, father, brother, and of the maid in the family were examined for ova of the fish tapeworm, and none found. The family ate much fish but always thought it well cooked. What appeared to be a normal stool of this child was estimated to contain 800,000 ova. This is the second native Indiana record and the ninth certain native record for North America.

4. Host, Jewish housewife of fifty-four years, born in what was Austria at the time but now is part of Poland. Has been in the United States for thirty-six years, has only noticed the worm during the past few months. Early in November, 1929, she passed 1380 mm. of mature segments of fish tapeworm. At writing, has not undergone treatment for the worm's removal. This housewife often prepares "gefuellte Fisch," says she never tastes it before cooking but does taste it while it is cooking. Owing to the long years this host has lived in the United States and the short time the worm has been noticed by her, this fourth Indiana instance is in all probability another native case, about the twentieth to be so far reported.

None of the four Indiana hosts of the fish tapeworm showed definite ill effects of harboring the parasite and presented essentially normal blood conditions. The essential harmlessness of the parasite is stressed by most recent writers (Magath 1929, Barron 1929). Warthin, who first predicted thirty years ago that this worm would become endemic in North America, does not regard it as a harmless parasite and holds it to be the cause of a pernicious-like anemia (Warthin, 1929), a view entertained by others (Ward, 1926).

Although there must be many more times the number of fish tapeworms living in Indiana than the four known instances, and although it has been shown that millions of ova eventually may reach Lake Michigan by way of the St. Joseph River, there seems little likelihood of this parasite becoming endemic in the state. Essex and Magath,

1929, have shown that the first intermediate host *Diaptomus oregonensis* is not a river inhabiting species, nor have they found plerocercoids of the worm in fishes of the Mississippi River. Vergeer never has found them in Lake Michigan fishes and only rarely in fishes from Lakes Superior and Erie. It is doubtful if there is much pollution by sewage of the waters of Indiana lakes. The host fishes are not common in Indiana waters. However, with the probable yearly importation of over 5,000,000 plerocercoids from Canada into the United States (Vergeer, 1929, January) and the continued preparation of "gefüllte Fisch," many instances of this interesting parasite probably will continue to be found among Jewish housewives and their young children in Indiana.

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SPECIAL ARTICLE

INDIANA UNIVERSITY SCHOOL OF MEDICINE

(Seminar December 13, 1929)

MEDICAL CASE

EDWARD BILLINGS, M.D.

The case we have to present at this time is in such a critical condition that it is impossible to move her. We are presenting this case to illustrate her many anatomical abnormalities, both congenital and acquired.

The case is one of a girl twenty-one years of age, unmarried, who came to the hospital August 30, 1929, with a complaint of general malaise and weakness, loss of weight, a visible deformity of the left shoulder girdle, and occasionally acute pains in the right abdomen. She also gave a history of having had a rise of temperature during the afternoon for the past six months. She had never had good health. At the age of six months her mother said she fell about two feet, striking her left shoulder on the floor; since that time she had this deformity of the left shoulder and chest. She evidently was quite susceptible to infections of the upper respiratory tract, having had many attacks of tonsillitis and sore throat. At the age of five she had scarlet fever in mild form. At six she had a swelling of the right knee, but according to the family the knee was not red or hot. This subsided in a few days. At the age of nine she developed what was termed "acute influenza," followed by acute otitis media.

One and a half years ago she had a sudden pain in the upper right quadrant of the abdomen. Her home physician was called in, and, due to the fact that one of her sisters had died of tuberculosis, and also that her mother had succumbed to tuberculosis when the patient was nine years of age, he made a diagnosis of probable Koch's infection. She was sent to Sunnyside, where an x-ray of the chest failed to reveal any active process in the lung; the sputum was negative, and they made the statement that she did not have tuberculosis. She returned home and then began to run a daily temperature ranging from 99 to 101 degrees. She gradually became more tired, the malaise increased, she became weaker and slightly anemic.

The physical findings when she entered the hospital were: a slight anemia, the present white count being around 8,000, and red count 4,000,000; hemoglobin, 70 percent; slight enlargement of the heart to the left; marked systolic blow at the apex, delayed sound at the apex, and accentuated second. Blood pressure was 152/60, temperature 100.3 degrees, usually rising in the afternoon. Marked scoliosis of the upper spine;

marked broadening of the neck posteriorly; rotation of left scapula toward the upper right; outward bowing of left clavicle; some muscular atrophy of left arm and chest wall, and considerable weakness in flexors, mostly on the left.

The abdomen was negative except for a slightly tender mass which we interpreted as being the right kidney. The extremities were essentially negative, although on being up and about there was a slight œdema of the ankles. Blood cultures showed streptococcus viridans repeatedly. The blood chemistry was normal. The urine showed, at first, a trace of albumin, which increased gradually until it is now 3+; no casts at first nor pus cells.

A diagnosis was made of streptococcus viridans septicæmia, endocarditis, and subacute nephritis.

One plate shows a small right kidney lying anterior to the sacrum and slightly to the left of the midline.

A plate of the cervical spine shows a cervical rib springing from the fifth vertebra and extending down anterior to the transverse process; also, a short cervical rib rising from the sixth vertebra and extending downward and backward.

A plate through the shoulder girdle shows a deformity of the left scapula with rotation. There is also marked deformity of the left clavicle. These were the most marked deformities.

The patient three days ago developed what we thought was a cerebral embolism that resulted in partial paralysis of the muscles of the left side of the face and some of the muscles of the neck. Following this she gradually developed a state which resembles uremia and is now in a very critical condition.

SURGICAL CASE

JOSEPH CLEVENGER, M.D.

We are presenting a case of first and second degree burn of the left leg. The patient is presented for two reasons: first, to show the fallacy of treating this type of burn with ointments, salves, etc., and secondly, to present the method of preparation for and subsequent skin grafting.

The patient, a white male, age seventeen, was admitted to the hospital October 26, 1929. His left leg had been burned eight days previously when the clothing covering this leg had been saturated with gasoline and ignited by the backfire of a motorcycle. On admission the leg was in about ninety-degree flexion. There were sloughing areas from the junction of the middle and lower third of the thigh to the ankle. The outer layers of the skin were present in many areas but were almost completely undermined by a gradually increasing low grade infection. The pathology was most marked in the popliteal space. Formerly, dressings of sterile vaseline and butesin picrate ointment had been used. Temperature,

102 degrees; pulse, 90; urine, negative. RBC, 3,800,000; WBC, on admission, 8,700, with 82 percent neutrophils.

The leg was placed in a hot, wet dressing of hypertonic saline which was kept saturated and warm. On October 28, 1929, under nitrous oxide anesthesia, as much as possible of the sloughing tissue was removed and the burned area covered with mercurochrome. The flexion deformity was corrected and the correction maintained by a Thomas splint. The wet dressings were continued.

On November 2nd the leg was again debrided, it being possible at this time to remove practically all of the slough. From this point our efforts were directed toward the preparation of a proper granulating area for the implantation of the skin grafts. The dressings were now changed to hot, wet, one-quarter percent chlorazene or Dakin's solution to remove the smaller areas of necrotic tissue and to combat the moderate amount of infection present. The patient was placed in a tub of salt water every other day and on removal of the dressing mercurochrome two percent was applied, the chlorazene being continued on reapplying the gauze.

On November 16th a course of ultraviolet radiation was instituted, the patient receiving six such treatments. On November 30th the area appeared to be in good condition and the Thiersch grafts were applied under general ether anesthesia. The grafts were covered with one layer of gauze which had been soaked in two percent mercurochrome. Next a rather thick layer of dry gauze was applied carefully. Sheet wool about two inches in thickness was applied over all and the leg wrapped with an all-elastic bandage in order to secure a firm, even pressure throughout. The dressings are not touched for five days. At the end of that time the bandage is removed carefully and after mercurochrome a vaseline gauze dressing applied.

Now the patient is in the stage of vaseline gauze dressing with the grafts firmly imbedded and well on the way to formation of a good protective covering of skin.

There are several objections to the use of ointments in burns of second degree. By placing a relatively waterproof covering on the area there is a marked increase in the amount of absorption of toxic elements into the general system, as shown by the increased temperature, the leukocytosis, etc. The ointment prevents the escape of the exudate which is always copious, from the involved area and thus impedes the process of repair. It also hinders the sloughing of the necrotic tissue, which in turn leads to toxic absorption, secondary infection, and increase in size of the involved area. The localized infection which results, although moderate in degree, is persistent and requires much care. The use of tannic acid in ten percent solution will obviate all of the above complications. It unites in chemical combination with the tissue, forming a firm, dry, tanned membrane which prevents the escape of body fluids, prevents infection,

and enables the patient to be cared for without suffering. In a high percentage of cases the new epithelium will grow beneath the tanned membrane, gradually pushing it from its attachments. Where no epithelization has taken place when the tanned membrane sloughs off a bed of granulation is left which is practically prepared for grafting.

The preparation of the involved area and the subsequent grafting can be divided into several stages, each of importance and demanding infinite care and much labor. First, the deformity which is almost invariably present must be corrected and the correction maintained. On extremities the Thomas splint serves this purpose well. The correction usually is made under gas anesthesia, at which time the second step, or the removal of the sloughing tissue, can be started. We use good stiff hand brushes and scissors if necessary. As much of the necrotic tissue as possible is removed at the first attempt. Hot, wet, hypertonic solutions are used to aid the natural sloughing. Mercurochrome also is applied in two percent solution, for we have discovered that it seems to have a specific action on the infection present, which is due usually to a combination of the staphylococcus and pyocyanus. Following the removal of the greater part of the necrotic tissue, chlorazene or any good oxidizing agent in weak solution is used. The area usually cleans nicely. Now the granulating area must be prepared for grafting. This area is given radiation with ultraviolet light to stimulate a good granulating surface with a sufficient blood supply. Sometimes the granulations grow too rapidly and become too exuberant before a satisfactory vascularity is obtained. These must be removed under anesthesia, if necessary, and this step repeated.

Now the grafts are applied, the thickest ones to the areas showing greatest involvement. It is very important that the dressing exert firm, even pressure, and have an absorptive base.

PEDIATRICS

G. BURCH MEHLIN, M.D.

This boy entered the hospital five or six days ago complaining of extreme swelling of the eyelids, face, lower extremities, penis and scrotum. The onset of this condition dates back about six weeks, at which time, from no apparent cause, the penis and scrotum began to swell. The doctor treating the case at that time incised the scrotum and allowed it to drain freely and the boy apparently recovered. Three weeks ago this same swelling recurred, along with swelling of the face, especially the eyelids. At that time the doctor made an analysis of the urine and found 1+ albumin. The boy ran no temperature, was up and around and apparently felt fine, except for the swelling. Because this persisted he was brought to the hospital as an out-patient.

The patients' past history was difficult to get because the parents were not cooperative. How-

ever, we found he had had measles, mumps, whooping cough, chickenpox, and pneumonia. The family history is essentially negative throughout, aside from the fact that three children had died in early infancy.

Physical examination at time of admission shows a white male, eight years of age, exceptionally well developed, and approximately twelve pounds over weight. Examination of the head shows eyes, ears, and nose to be negative; tonsils slightly inflamed and buried; œdema of the eyelids of rather marked degree. Neck showed marked cervical adenopathy, bilateral; there was no indication of hypothyreosis; heart was normal. Blood pressure 112/70. Examination of the abdomen at that time showed it to be rather hard and tympanic, evidently containing considerable fluid. Both penis and scrotum were very much enlarged and almost translucent. Examination otherwise was negative.

Laboratory work: Patient voids about 500 cc. of urine per day, slightly cloudy, specific gravity 1008, negative for sugar, 3+ albumin, and a white count of 12 with an occasional red cell. Red blood count 4,300,000; white count 11,800; hemoglobin 90 percent. Blood urea normal; blood cholestrin, which is said to be unchanged in certain types of urinary disease, was 312 milligrams, which is about double the normal findings. Blood Wassermann was negative; von Pirquet's skin test was negative.

As to diagnosis, we feel this is a case of nephrosis, or the tubular type of nephritis. I am open to the criticism that no one really can classify nephritis. According to men like Martin of St. Louis and Davis of Hopkins, nephritis is divided into two types—those with hemorrhage with or without œdema, and those without hemorrhage with œdema, tubular nephritis, or nephrosis, of which we think this case is an example.

As to treatment, the patient was of course confined to bed the first twenty-four hours, which diminished œdema of his genitalia and legs. Since he is in an isolated ward, we have no report on the x-ray of the sinuses or the antral washings. It is said that usually in these cases the maxillary sinuses are the seat of a staphylococcus infection. His tonsils were inflamed and probably, as soon as this subsides, will be removed. I believe that nowadays pediatricians do not wait until the nephritis has subsided to remove foci of infection. Purges and sweats have been suggested, and I think are of value. The patient has been placed on a high protein diet, three grams per kilogram of body weight, because it is felt that the patient loses a considerable amount of albumin and this must be restored. The patient's fluids have not been restricted. If he had any cardiac discomfort, we then would restrict them.

As to prognosis, I was interested in the statement today in the Johns Hopkins Bulletin that

only thirty percent of their cases have recovered. I had understood that patients with tubular nephritis offered a much better prognosis than those with glomerular nephritis. This boy we hope will continue to improve. It is possible he will have recurrent attacks, but if we are able to control them, he will probably go into adult life in approximately normal health. This morning both eyes were practically shut, and there is still considerable oedema. The abdomen is still distended slightly, indicating considerable fluid. The penis and scrotum are very different from what they were; now they are almost normal. His ankles on admission were markedly oedematous and pitted on pressure, but that has subsided.

ORTHOPEDIC CASE

GEORGE J. GARCEAU, M.D.

A white boy, fifteen years old, admitted to the Riley Hospital complaining of swelling of the right knee, discharging right ear, loss of weight, pain in lower right chest, and weakness.

Patient's father died of diabetes at fifty years of age. Father was six feet and three inches tall. One sister three years old is taller than normal. He has had chickenpox, mumps, measles and whooping cough with good recoveries. Otherwise he has enjoyed good health until one year ago when he was struck over the left ear by a volley ball. He bled from the middle ear for about two days and then pus began to discharge. This discharge has been intermittent. He has no pain over the ear or mastoid.

About six weeks ago (November 1, 1929) the left knee became swollen over night but was not red or warm and not very painful. Three days later the right knee became similarly swollen. He walked with a stick. About this time he had pain in the right lower chest which was not affected by deep breathing but he had no cough. In about one week he had recovered.

On December 2, 1929, the right knee became swollen again and felt as if sprained. It has remained swollen.

He states he has always been tall but has grown unusually rapidly during the last three years. In the past year he has grown at least six and one-half inches. Now he is six feet and one inch tall and weighs only 130½ pounds. In June, 1929, he weighed 139 pounds.

Physical examination reveals a very tall, thin, pale, white male. Skin rather dry but elastic. Body is rather well proportioned. Head is of the dolichocephalic type. Superciliary ridges are prominent. The mandible is not unusually enlarged. The teeth and tongue are normal. Pus is visible in the pharynx; tonsils enucleated. The ears are large; the left is discharging a small amount of foul smelling pus. The eyes are clear,

but there is a rapid lateral nystagmus. He does not see well without glasses. Eyes test: right 20/50 and left 20/200. Fundus oculi are normal. Visual fields normal. The nostrils are thick and large; pus and crusts are visible in the nose. X-ray of antra show hyperplasia of the mucous membrane in the left. Stereo films of the skull are negative for intracranial abnormalities. Thyroid not enlarged. The chest is long, its anteroposterior diameter increased. Respiratory excursion is good. Impaired resonance over the left apex and whole right lung but especially over right base posteriorly. Few rales heard in right base. Heart normal.

X-rays of chest show marked increased trunk markings over right base. Lung fields are rather elongated and slightly emphysematous. A general haziness is present throughout the right lung field. Markings also increased in right upper third.

Abdomen is normal.

Genitalia normal. Hair distribution normal.

Reflexes are normal.

There is a long kyphosis of the dorsal spine.

Extremities: Arms and hands are normal, but hands are rather large. Right knee is swollen, tender to touch, knee cap is freely movable and fluid is present in the knee joint. Very slight increase in surface temperature of right knee. The large toe on both feet seems to be large in comparison to the other toes. Both feet are pronated. X-rays of the knee show periosteal thickening of the lower right femur, and fluid in the joint.

The blood count, hemoglobin, urine, blood chemistry and blood sugar were normal.

Psychometric examination was normal.

We may dismiss the otitis media and chest condition in this discussion. The significant points here are the rapid growth, loss of weight, dolichocephalic head, large ears, prominent superciliary ridges, slanting mandible, large hands and feet with enlarged greater toes, kyphosis, painful joints and loss of strength. All these signs may be attributed possibly to over-activity of the hypophysis. The impairment in vision and nystagmus may be caused by enlargement of the hypophysis. Whether the swelling and pain in the joints is caused by the glandular disfunction or infection we are uncertain. Other signs looked for but not found were enlargement of the tongue, separation of the teeth, disturbance in visual fields, infantilism of genitalia, glycosuria and polyuria. The boy is rather slow moving and contented.

To summarize, we have a fifteen-year-old boy presenting signs of over-activity of the pituitary before union of the epiphysis has occurred, whose father, apparently a giant, died of diabetes (type unknown). It might appear that a diagnosis of early acromegaly is justifiable. It will be interesting to follow him during the next three or four years.

OBSTETRICS

DRS. WISEMAN AND ROGERS

DR. ROGERS: This patient entered the hospital two months ago complaining of severe pain, especially in the lower part of the abdomen, intermittent in character. This pain had been present off and on for two months before admission.

On physical examination nothing could be found except a mass in the left pelvis about the size of a grapefruit. The laboratory report was essentially normal except for the white blood count. Operation was advised. Upon opening the abdomen a pelvic abscess was found on the left side, very adherent to a part of the sigmoid. The abscess was evacuated and removed, leaving a part of it adherent to the sigmoid and part of the large bowel. Her convalescence has been interrupted by rectal abscesses and also by drainage of sinuses through the abdominal incision.

DR. EARL WISEMAN: This case is presented because the patient had an interesting history. She was admitted to the Coleman Hospital first last spring when she was eight months pregnant and had been bleeding. She was thought then to have premature separation of the placenta and a dead baby. Labor was induced with a bag. She delivered a still-born fetus. Following this delivery she was quite ill with high fever, phlebitis in both legs, and later developed a lung abscess. She also had a rectal abscess which ruptured spontaneously, evacuating approximately a pint of fluid. She became quite anemic. At the time of that admission she was a large and very fat woman. Later she became anemic, the fat so flabby and soft that when she lay in the middle of the bed she covered the most of it. The lung abscess drained spontaneously, evacuating large quantities of pus. The temperature ranged between 101, 104 and 105 degrees for approximately a month or five weeks. She was given a blood transfusion which had such a reaction that we thought she was going to die, but she got better and was transferred to the Robert W. Long Hospital as a medical case. We suspected pelvic inflammatory disease, but nothing definite could be determined at that time.

At the Long Hospital she was thought to have a lung abscess, but on aspiration no pus was obtained. She remained in that hospital for about six weeks and was discharged in fair condition.

She returned to the Coleman Hospital, as has been mentioned, a few weeks ago. The suspected diagnosis was a fibroid tumor that was probably infected, but at operation we found a large tube abscess which involved a portion of the bowel. A half-pint of pus was obtained. Since the large vessels were involved in this mass, we were unable to remove it entirely. We evacuated the abscess, removing part of the abscess wall, and put in drains. She still has a sinus draining through the abdominal wound. Recently a rectal abscess had to be drained.

OBSERVATIONS ON THE ACCLIMATIZATION OF LOWER ORGANISMS TO ARSENIC

J. H. WEATHERBY, M.D.

Various questions revolve around the phenomenon of acclimatization of organisms to poisons, which arouse considerable interest among both scientists and laymen. The geneticist looks at this phenomenon of acclimatization to substances which are normally toxic as being part of a possible acquired characteristic, and he then studies the inheritance of this characteristic. The physiologist looks upon this acquisition of new characteristics as being possibly some sort of change in the physiological functioning of the organism. The layman occasionally perhaps looks upon the acquisition of increased resistance to poison as being a means of defeating somebody who has a grudge against him. If he has a suspicion of being poisoned he tries to build up resistance to this particular poison and in that way escape death. I say this because we are not certain that this can be accomplished with great success, and the length of time required for bringing about the change is not at all definite.

The first paper I want to refer to is by a man named Jollos, one of the men who worked on this with a view to establishing acquired characteristics, and then studying the inheritance of these characteristics. He began his work in 1911, using principally as the organism for experiment the paramecium. He conducted this work for a period of nine years, with a few interruptions during the war. His preliminary report was published in 1919, and a detailed account of the work in 1920. He found, briefly, that by subjecting this organism, paramecium, to a slightly sublethal dose of arsenic trioxid for various periods of time he could increase the resistance of this organism to arsenic several fold. He used a concentration of 1 to 100 as a standard solution. He found that a group of organisms had a resistance of approximately 1.1 percent to this standard solution; but after exposure for some time to arsenic trioxid he could increase the resistance to as much as six or seven percent. Furthermore, this increased resistance persisted for some time, as long as twelve months, and when we consider that the paramecium divides once in twenty-four hours, that period of twelve months represents 365 generations, so he had the transmission of this acquired characteristic in twelve months to approximately 365 generations. Nearly any sort of characteristic which is transmitted through 365 generations in human beings is considered as more or less a permanent characteristic. Jollos used in this experiment the paramecia cultured in a medium of lettuce infusion, the principal other organism present being bacterium proteus. The paramecium lives primarily on bacteria. It is not positive that it cannot absorb food material directly through the cell

membrane; in fact, there is some evidence that it can, but probably the majority of the food taken by this organism consists of bacteria. Jollos, however, did not take into consideration the importance of these accompanying organisms. Thus his results were not reliable to the extent they might have been had he considered this factor.

The second paper was by another German named Neuschlosz, who carried out the same experiment and obtained essentially the same results—something resembling acclimatization to arsenic trioxid. He found that in cultures in which ordinary trioxid had been allowed to remain for any time the trioxid disappeared, and was replaced by the pentoxid—a conversion of trioxid into pentoxid. The trioxid is approximately six times more toxic than the pentoxid; and he believes the organism introduced produced some sort of catalyst which transformed the toxic trioxid into the less toxic pentoxid. Neuschlosz, however, did not take into consideration the bacterial factor, just as Jollos neglected to do, so his work does not carry as much weight as it might otherwise.

The third paper is by Harnisch, published in 1926. Harnisch worked on several different poisons and with several different organisms. He used another one of the ciliated infusoria, colpidium campylum, with quinin hydrochloride as a poison in his experiments in which he tried to obtain some degree of acclimatization of the organism. He used one percent grape sugar solution in which he had bacterium coli as a culture medium. At the beginning of his experiments the pH was 6.4 to 6.6, but it was not long before it dropped to 4.5 to 4.8, quite a considerable increase in acidity. He thought he found quite an increased resistance to quinin hydrochloride. They could withstand three times the amount of quinin hydrochloride which would otherwise be toxic. However, that is not a true explanation of the phenomenon. That lies in the fact that the quinin hydrochloride is less toxic in acid solution than in alkaline solution. In other words, when the bacterium coli in his cultures caused fermentation of grape sugar lactic acid was produced, which lowered the toxicity, and in that was the quinin hydrochloride made so much less toxic that the organisms could live comfortably in a concentration which otherwise would be fatal. These organisms, then, really were not acclimatized at all. There was apparent acclimatization due simply to the action of the bacteria on the media. The change was a physical one rather than physiological.

He carried out experiments in acclimatization, using essentially the same system as Jollos—the paramecium in a culture medium of lettuce water. At the end of a brief period of acclimatization during which the paramecium was subjected to a sublethal dose of arsenic trioxid, they apparently had increased the resistance to trioxid. They could

withstand several times the amount which originally would be lethal. However, his experience with colpidium made him more careful. He examined the culture media to find out whether this apparent acclimatization might be bound up with changes in hydrogen-ion concentration; then he examined the bacterial flora to see if it might not have changed the arsenic from trioxid to the less toxic pentoxid form. He conducted what we might call a blank experiment. He put arsenic trioxid into a culture similar to normal cultures except that it did not contain paramecium, and found the trioxid was oxidized to pentoxid. Furthermore, he found that if a given group of bacteria was allowed to oxidize the trioxid to the pentoxide, subsequent oxidization would take place in a much shorter time. For example, bacteria placed in a concentration of the trioxid of 1 to 1000 might effect an oxidization of the trioxid to the pentoxid in ten days; but after that, if they were exposed again, they could oxidize the same quantity in twenty-four hours. So it seems that the apparent acclimatization of paramecium to arsenic trioxid was really an acclimatization of the bacteria to arsenic.

That particular observation is not limited to his studies. It has been made more or less frequently in medicine, where we find an almost direct parallel with this. There are certain diseases which are treated with organic arsenicals, probably the most common being syphilis. The organism responsible for syphilis is *Treponema pallidum*, which is killed under laboratory conditions by arsenic trioxid. The arsenicals used in treating these diseases are for the most part compounds of trivalent arsenic, a form which would correspond to the highly toxic trioxid. In treating these diseases it has been found by experience that small doses repeated frequently do not give as beneficial results as larger doses repeated less frequently. When smaller doses are used observations made of the patients seem to indicate that the pathogenic organisms responsible for the disease become very highly resistant to arsenic—such a condition as we describe as “arsenic-fast.” There is no definite proof that these organisms become arsenic-fast, but observations indicate that such a thing probably occurs, and explains best the observations that have been made.

The observations of Harnisch are the first which show beyond any question of doubt that an organism may become arsenic-fast; that its resistance may be increased to a remarkable extent to some substance which is toxic.

The final question which must arise from any such series of observations is, “What is the mechanism by means of which these changes are brought about?” There is a large number of theories. I do not think any one entirely covers the situation. But if we go into the physical chemistry of arsenic and perhaps some other chemical substances we

may get another idea. One theory more or less added to the large number which exists will not complicate matters very much. Arsenic is in the same group in the periodic table with certain other elements which are called metalloids. Arsenic is peculiar in that sometimes it acts as a metal and other times as a non-metal. Antimony is another chemical of this type. It has been found experimentally that a solution containing antimony trioxid, a compound similar to arsenic trioxid, may be oxidized readily to antimony pentoxid, and that a certain amount of antimony pentoxid may serve as an auto catalyst to speed up the further oxidization of the trioxid. If antimony pentoxid may serve as an autocatalyst, and if arsenic is so closely related to antimony, then might we not imagine that arsenic pentoxid may act as an autocatalyst for the further oxidization of the trioxid? If that be true, then organisms which have once oxidized the trioxid might oxidize a second dose much more rapidly than the first. If they are exposed to an initial dose of arsenic trioxid and have oxidized it successfully—and these oxidization processes we think must occur in the body—then, perhaps, some of the end products of oxidization might remain diffused throughout the cytoplasm of the cell. The passage of time and the multiplication of the organisms would cause the distribution of pentoxid among many daughter cells. We would expect this acquired characteristic to disappear with the passage of time and with the increase in number of daughter cells. If we have arsenic pentoxid scattered throughout the cell, and if it may act as an autocatalyst, then such an organism equipped with this protective pentoxid might easily remove the arsenic from a poisonous state to a less poisonous state much more rapidly after its initial experience.

All this is theory, and if we assume the theory is well grounded, the next question is that of its value. Frankly, we have not been able to find any definite value that might arise from it. We cannot use the pentoxid in fortifying the human body against arsenic trioxid, since we would at the same time fortify the pathogenic organism also.

TRICHOMONAS VAGINALIS VAGINITIS COMPLICATING PREGNANCY

GERALD W. GUSTAFSON, M.D.

Generally so little is known concerning the vaginitis caused by the organism *Trichomonas vaginalis* that many cases go unrecognized. Especially is this so during pregnancy and many cases are diagnosed wrongly as chronic gonorrhea, endocervicitis, vaginal thrush, or even as normal secretions of pregnancy. The condition presents a definite clinical picture and the causative organism is a parasitic, flagellated protozoan.

Historical. *Trichomonas vaginalis*, according to Greenhill, was first described by Donne in 1837. Hausmann in 1870 reported finding the organism

in 37 percent of pregnant, and in 40 percent of non-pregnant women. In 1916 Hoehne found the organism in 34 percent of pregnant and 28 percent of non-pregnant women. Reuling found the parasite in 18.4 percent of women and Schmid and Kamniker in 69.9 percent. Besides these German reports, the organism has been found in Russia, France, Honduras, Costa Rica, and in our own country. Although there has been some doubt concerning the pathogenicity of *Trichomonas vaginalis*, Hoehne, like Donne, Hausmann, Kolliker, and Scanzoni, found that the organism was present only when the vaginal secretion was abnormal. Marchand and also Arnold say the organism does not cause disease, but it exists in a pathologically changed mucosa. Hoehne, Gragert, Liss, Traugott, Littauer, Schmid, and Kamniker and A. Seitz claim that the organism is distinctly pathological in many cases. During pregnancy Hausmann found the organism in 37 percent of cases, Schmid and Kamniker in 24.4 percent, Seitz in 20 percent, and Liss in 19.5 percent. Nearly all of Schmid and Kamniker's patients had fever in the puerperium, especially those who had lacerations and operative deliveries. These authors maintain that the presence of trichomonas during pregnancy forebodes a febrile puerperium. Gragert and Liss came to the same conclusion and both urge treatment during pregnancy and the avoidance of internal examination and manipulations during labor. In this country DeLee, Greenhill, and C. H. Davis have contributed valuable papers on the subject.

Study of the Organism. The exact origin of *Trichomonas vaginalis* is unknown. A trichomonas organism is encountered frequently in the mouth and feces of normal persons. These organisms have not as yet been identified as the same.

The proper way to study the organism is to make a hanging drop slide from the vaginal secretion. Davis favors diluting the drop with normal salt solution. This, however, is not necessary if one studies the periphery of the drop. With the ordinary high power lens of the microscope the organism can be found readily, thanks to its motility.

There is considerable variance in size, the dimensions reported varying from ten to thirty u. in length and from six to eighteen u. in width. The shape also varies, some being cigar shaped and many pear shaped. The front end is rounded and from it protrude four flagellæ which rise from a common stem and are approximately half as long as the body. Starting near the base of the flagella an undulating membrane runs somewhat spirally along the entire body to the posterior end, which is usually pointed. The protoplasm of the organism is not homogenous, but contains myriads of fine granules. Throughout the cytoplasm are small vacuole-like areas which are irregular in number and shape and give a distinct fat reaction with Sudan III. The nucleus of the organism is

situated near the base of the flagella and is oval or pyriform in shape. In the fresh hanging drop preparation the organism is in constant motion. The movement of the flagella is somewhat similar to that of a fishing line when cast. They first strike sideways, then undergo a circular movement toward the middle, and finally their free ends turn inward. By means of this motion the flagella force bacteria, cellular debris and fat droplets toward a tubular organ which evidently serves as the mouth. The locomotion of the organism is dependent not on the flagella but the undulating membrane. Occasionally the organism moves by its extrusion of pseudopods like an amœba. Pseudopods are extruded also for purposes of the phagocytosis of leukocytes and bacteria. The organism can be stained by ordinary Grams stain, by Heidenhain's iron hematoxylin after moist fixation with bichloride alcohol. For making slides the discharge high up in the vaults and in the vaginal wall should be used. Cultures are hard to obtain, but have been successful using blood serum diluted with sodium chloride, Locke's solution, or Ringer's solution, and also in five percent human serum in glucose broth. Noguchi used a medium of half ascitic fluid and half Ringer's solution, while Schmid and Kamniker used ten parts of nephritic urine to one part of blood serum.

Trichomonas vaginalis nearly always lives in symbiosis with other organisms, usually bacteria, the latter of which are most always Gram negative cocci smaller than gonococci. In most cases this is *Micrococcus aerogenes alcoliogenes* and explains the gas bubbles found in the vaginal discharge of many cases.

The trichomonas can be kept alive at room temperature for three to four hours. Attempts to inoculate rabbits, guinea pigs, and dogs have been unsuccessful.

Diagnosis. The clinical picture of *Trichomonas vaginalis* is definite. The patient complains of a profuse discharge which is often associated with itching and burning of the vulva. Many of the patients are extremely nervous and unable to sleep. The discharge itself is usually greenish-yellow in color and often contains many gas bubbles. The introitus is reddened and often studded by small condylomas. The vaginal mucosa is very red and often very sensitive. Frequently punctuate hemorrhagic areas are present. The external os is often red and may bleed very easily though no erosion is usually present. Edema of the vulva was marked in one case seen at the Coleman Hospital. Most of the discharge is found in the vaginal vault. It may be acid, alkaline, or neutral. The infection seems to be no respecter of the social scale.

In addition to the symptoms and clinical picture, a hanging drop slide must be made to clinch the diagnosis. Often painstaking care is required to find the organism and if after treatment a sin-

gle organism can be found the case is not cured.

The presence of gonococci and the appearance of the local urethral and cervical mucosæ will differentiate this condition from *Trichomonas vaginalis*. The complement fixation test also may help to exclude gonorrhea.

Endocervicitis is distinguished by the appearance of the infected, eroded cervix and the absence of trichomonas in the hanging drop.

While the discharge of vaginal thrush is somewhat similar to that of trichomonas, speculum examination will disclose in the case of thrush the cakey, cheesy membrane on the vaginal wall.

Treatment During Pregnancy. During pregnancy it is evident that only conservative methods should be used. DeLee in 1919 started to use .5 percent lactic acid solution douches in an attempt to re-establish a normal bacterial flora in the vagina. Glycerine in full strength stops immediately the motility of the organisms. In addition, absolute alcohol, one percent Lugol's solution, 1-5000 bichloride of mercury, 1-400 lysol, full strength green soap, and five percent silver nitrate have been proved by Davis to stop at once the motility of the organisms.

It has been my custom to use sodium bicarbonate douches (one teaspoonful to two quarts of water) twice each day, and to insert glycerine-soda tampons three times each week until the infection is under control, or up to the last month of pregnancy, no treatment being given during the last month. The patient must be instructed how to sterilize the douche points and how to take the douche under very low pressure.

Greenhill has reported eight patients treated during pregnancy and is convinced that he has prevented morbidity. Seven of the patients went to term and delivered as follows: Spontaneous 3, low forceps 3, Cæsarean section 1. In all cases the puerperium was uneventful. The eighth case had a spontaneous miscarriage with no complications.

To this I can add four cases. One patient came in pregnant and with the typical discharge and symptoms which had been present for three years. The hanging drop showed many of these trichomonas organisms. She was treated up to the last month of her pregnancy, then delivered normally, and had a perfectly afebrile puerperium. Up to now, two years after delivery, she has had no recurrence of symptoms. Another patient had had the discharge for at least two years. Cauterization of the cervix had been suggested to her. The hanging drop slide showed many of these organisms. She was treated, went to term, and was delivered with low forceps after episiotomy. Her puerperium was entirely afebrile.

The third patient, admitted during her seventh month of pregnancy, was treated until the beginning of the ninth calendar month, at which time, however, the hanging drop still showed many organisms. She had a normal delivery with a one-degree laceration which became infected.

The fourth patient, admitted at term, received no treatment, although the hanging drop showed many organisms. She delivered normally, no vaginal examination or manipulation being done. In spite of this and the fact that there was no laceration, she ran some fever during the early puerperium.

Conclusions: 1. *Trichomonas vaginalis vaginitis* during pregnancy may be diagnosed by the clinical picture plus the finding of the organisms in the hanging drop slide.

2. When occurring during pregnancy, the condition should be treated in order to prevent puerperal morbidity.

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REPORT ON SOME EXPERIMENTS ON THE EFFECT OF DISTENSION OF THE BOWEL UPON ABSORPTION BY THE BOWEL—SUMMARY

W. D. GATCH, M.D.

We carried out some experiments a year or more ago in which we showed that as the distention of the bowel is increased the flow of blood through its blood vessels is diminished.* By a special technique we measured the venous outflow from an inflated loop of bowel. When the pressure within the bowel equaled the systolic blood pressure we found that the circulation of the bowel ceased. We were able to plot a curve which shows that the blood flow varies inversely as the pressure within the bowel. Dragstedt has repeated and amplified our experiments, and has demonstrated that the effect of intra-intestinal pressure is most marked in the duodenum, and least marked in the colon. These differences, according to Dragstedt, are due to variations in the distribution of the

blood vessels to the bowels at various levels in the intestine.

The foregoing experiment was the starting point for the work to be reported tonight. It occurred to us that there can be no absorption where there is no circulation, and that therefore the idea that distention of the bowel increases absorption of noxious substances from it must be wrong, insofar as absorption by way of the vessels of the bowel is concerned. To test this we drew a loop of bowel to the outside of the abdomen of an anesthetized animal, inflated it strongly and then injected a large dose of nicotine or of potassium cyanide into it. Nothing happened till we decreased the intra-intestinal pressure to about half the amount of the systolic blood pressure of the animal. At this point the animal showed suddenly the systemic effects of the poison.

We next repeated the same experiment except that we kept the inflated loop inside the abdomen. In this case we observed at the higher level of pressure signs of absorption.

From these experiments we deduce that distention of the bowel diminishes absorption from its lumen by way of the mesenteric vessels, but does not prevent transperitoneal absorption. There is reason to believe that the latter is increased by distention. We are repeating and extending these experiments and hope to publish our results in the near future.

If absorption from a distended bowel is chiefly transperitoneal, then nature has a better chance to prevent it.

The remainder of the talk was a discussion of the treatment of advanced intestinal obstruction. The point was made that the better understanding of intestinal obstruction which has been obtained by experimental studies has made the treatment more hopeful.

*Effects of Gaseous Distention on Obstructed Bowel. Gatch, Trusler and Ayers. *Archives of Surg.*, June, 1927, Vol. 14, pp. 1215-1221.

TOBACCO SMOKING

In a series of 150 adult male smokers reported on by WINGATE M. JOHNSON, Winston-Salem, N. C. (*Journal of the A. M. A.*, August 31, 1929), the systolic blood pressure was 128.23, the diastolic 78.87. In the same number of nonsmokers, the average systolic pressure was 129.64, the diastolic 79.23. The average age was practically the same, 42.63 years for the smokers, 42-41 for the nonsmokers. The weight of the smokers was 164.44, of the nonsmokers 161.08. The height was the same. Of sixty fatal cases of angina pectoris in males, forty-two, or 70 percent, were in smokers; eighteen, or 30 percent, in nonsmokers. As a control, of 1,000 adult males taken from telephone directories in five cities, 81.8 percent were smokers. In a series of twenty individuals tested, the blood pressure after smoking showed no change in five but dropped in fifteen. The average fall in blood pressure after smoking for the whole group was 4.9 systolic, 3.4 diastolic. Johnson concludes from these data that tobacco smoking apparently has no permanent effect on the blood pressure. There is no foundation for the popular belief that smoking decreases the

weight of an individual. It is doubtful whether tobacco plays a major part in the etiology of angina pectoris. The act of smoking, if it affects blood pressure at all, reduces it temporarily. The effect of tobacco smoking is chiefly local, exerted principally on the pharynx.

VARICOSE VEINS AND THEIR SEQUELAE

One hundred and sixty cases of varicose veins and their sequelae were studied by Geza de Takats, Chicago (*Journal A. M. A.*, March 9, 1929), as to age and sex incidence. More than 1,000 injections with 50 percent dextrose were made. An individualizing management, consisting of supportive, injection and surgical treatment or treatment can be estimated only after five years. Recurrences are well known to occur after radical excisions and tabulated. The possibility of pulmonary embolism following injection treatment and surgical treatment is discussed. The end-results of the surgical and injection of the vein following injection has been studied. Immediate results of the various forms of treatment are their combination is described. The histological reaction may be expected following the injection treatment.

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EDITORIALS

THE INCORRECT DIAGNOSIS OF CANCER

The dread of cancer is widespread. Efforts to educate the laity on the danger of delaying operation have increased this fear. The physician has been urged to make the diagnosis of cancer early, but little has been said to him about the woe he can cause by making a wrong diagnosis. When the wrong diagnosis is made, whether operation is done or not, the patient, figuratively speaking, is liable to die of cancer many times. If he refuses operation he is apt to be cured by Christian Science, chiropractic or Koch's serum, and so to bring scientific medicine into disrepute. Women are seeking medical advice early for suspicious conditions of the breast and uterus. This places a heavy responsibility upon the physician.

In these early cases there is no simple and easy method of diagnosis. Once the question of cancer has been raised, it must be settled and settled correctly. The gross appearance of the lesion on section or curettage may be sufficient, but this examination always should be followed by microscopic study by a competent pathologist. In no case should the patient be told that she has cancer, or that she "has something which may develop into cancer" until the diagnosis is certain. Otherwise she may suffer years of needless mental torment.

COMMERCIALIZING PHYSIOTHERAPY

Physiotherapy has its place in medical practice, but something must be done to stem the tide of commercialism that now surrounds it. There have been established low-grade proprietary schools of massage and physiotherapy, and manufacturers are sponsoring commercial courses in physiotherapy given by unqualified or perhaps by partly qualified lecturers. Worse than all, some of the manufacturers are selling their wares to drug stores, department stores, and even direct to lay persons, accompanied by books or pamphlets giving indications for and how to use physiotherapy appliances. In some states an attempt has been made to license physiotherapy, and in some barber shops you can find signs that advise the public

that one or more of the employees of the shop are prepared to give physiotherapy treatment for various imaginary or real ailments, and most of the athletic departments of clubs offer similar attention. In consequence of all this, physiotherapy is getting an undeserved black eye among many medical men who are thoroughly disgusted with so much commercialism and such deception in connection with the employment of a valuable adjunct in the treatment of many abnormal conditions of the human body. To offset this there must be some attempt made to educate the public as well concerning the field of usefulness of physiotherapy and its exact limitations. The Bureau of Publicity of the Indiana State Medical Association can well afford to have two or more articles for lay consumption dealing with this proposition.

"A SERIOUS MEDICAL PROBLEM"

In this number of *THE JOURNAL* we publish an original article entitled "A Serious Medical Problem." It offers some food for thought, as it concerns some of the economic problems that are of interest not only to medical men but the public as well. There is not the slightest question of doubt that the medical profession is very strongly aiding in the production of dependency and pauperism, and there really is no more excuse for it than there is excuse for unnecessary and ill-advised bestowal of alms by benevolent or charitable organizations to people who are or should be self-supporting. To our way of thinking, the high-pressure salesmanship of today, with its attendant unfair and illogical credit extension, is responsible for most of our ills. No one can make us believe that we are occupying a safe economic position when a very large proportion of the public not only is using up all present capital but eagerly mortgaging future capital for the purpose of obtaining and enjoying luxuries. The installment plan of paying for things is ruining many a man in the ordinary walks of life, in that it is teaching him to be extravagant or to live beyond his earning power, and with the first signs of distress he crashes and blames society in general for it. Medical services are just as much of a necessity as food, shelter and raiment, but in the vast majority of instances no provision has been made for medical services and in consequence the physician is paid after the other necessities are taken care of, and installments paid on such luxuries as automobiles, radios, electric washing machines, and other appliances, and not infrequently the physician gets nothing and figuratively speaking is left "holding the bag." Hospitals, too, suffer in a similar manner, though they usually have their deficits made up through contributions of one kind or another. Unfortunately the physician has no one to make up his deficit for him. It is hoped that these economic problems will have greater logical consideration than they have in the past.

and that in the solution of them medical men will come in for fair consideration. However, the old saying that "the Lord helps those who help themselves" applies to physicians, and if they do not make any individual and collective endeavor to get themselves out of trouble, they will have no one to blame but themselves for any serious predicament in which they will be placed.

CHARGING THE CLERGY

One of the most prominent and most respected older physicians in the state of Indiana rendered professional services to a clergyman's family and in due course of time presented a bill for the services. The clergyman, apparently in high indignation, asked the meaning of the bill, and the physician answered, "Why shouldn't I send you a bill?" The clergyman then said, "I have been in the ministry for over fifty years and received much medical and surgical service for myself and members of my family, and this is the first time that I ever have received a bill for the same." The physician asked, "Just why haven't you received a bill for any of the services rendered you?" To which the answer was, "I suppose because it is not customary to render bills to clergymen for professional services rendered, as clergymen are able to do so much for physicians by recommending them to parishioners."

It was then the physician's turn, and he said, "During all the past fifty years you have been accepting bribes from physicians to recommend them to your parishioners. You have commercialized and prostituted your position for unholy gain or graft. You are just as dishonest and unfaithful to a trust as the corrupt city alderman or public official who gives out a contract to a plumber or other mechanic who surreptitiously pays a fee to receive the contract. You are asking me not only to buy my way into your confidence, but to buy your influence among your parishioners, and I refuse to be a party to any such dishonest bargain. I am willing to render professional services to you or any member of your family on the same basis that I render service to the most influential citizen in the community, and I shall charge you as I charge him, fees that are consistent with your ability to pay. I recognize the fact that clergymen too often are paid small salaries, sometimes so small as to prohibit decent living, and I am willing to take that fact into consideration in estimating the value of my services to you, just as I take the financial condition of the poorest workman in this community into consideration when I render bills to him for professional service, but I am not willing to treat you or consider you my patron under any other conditions."

It so happened that the clergyman never had considered the subject in the particular light in which it had been placed, and he saw the logic of

the argument at once and said, "Doctor, I congratulate you upon your fearlessness as well as your honesty, and in consideration of your recognized ability I am frank in saying that I would rather call you than any physician of my acquaintance." Thereupon he paid his bill, and for many years thereafter he not only employed but spoke in the highest terms of the physician who had put him on the right track. Unfortunately, there are altogether too many clergymen who are not only willing to accept but will exact a bribe such as that to which attention is called, and altogether too many physicians are quite willing if not anxious to buy the services and influence of one or more clergyman drummers to aid in the acquirement of patrons.

AS ONE OTHER SEES US

George Jean Nathan is a writer of some note. In the January issue of *Vanity Fair* he takes a vicious slap at medical men in general and some in particular in an article entitled "Oh, Doctor!", in which he recounts his various and many ailments from which he has suffered and for the relief of which he vainly has spent thousands of dollars and consulted hundreds of what he calls the most prominent and supposedly talented physicians both in this country and abroad. His first wallop is as follows: "Like most human beings I have been assailed by the average repertoire of malaises; like most human beings I have on such occasions called up a medical gentleman for professional advice; and, like most human beings, I have nine times out of ten subsequently found that I might just as well have saved the money." He admits having employed practically all of the recognized up-to-date types of treatment, including the use of various rays, massages, removal of supposedly diseased teeth, the opening of sinuses, the taking of various drugs, exercises, diet, and in fact using almost everything that ever has been suggested by doctors for the relief of discomfort. He then says, "The trouble with doctors I find is that they seldom admit that anything stumps them. When they don't know what's wrong with you, or knowing, of the way to cure it, do they confess as much? No, they do not. With the old ten-dollar fee in sight they invariably proceed to mask a guessing contest as science."

Following this he tells about trying for years to cure an obstinate neuritis of his right arm, and consulted numerous doctors and took an endless amount of treatment without results. Finally, an instructor in athletics told him to do without a cushion in his chair, and presto-chango! the neuritis disappeared. This was after he had indulged in chiropractic treatment to the extent of \$250 worth; x-ray of the teeth to the amount of \$35, and so on down the line of examinations and therapeutic endeavors to conquer the trouble. He winds up by bringing an uncle into the picture

who for many years had suffered from a burning sensation on his tongue for which he had spent many dollars and consulted many physicians. Finally, a German bartender told the uncle to put half a teaspoonful of salt in a glass of warm water and wash the mouth out with it about six times a day, and, presto-chango! a cure resulted!

All of this recital, by a well-known and talented writer in a widely circulated monthly magazine, in all probability is in some measure exaggerated as well as exceptional. In fact, it would be interesting to know the exact recent experience which called forth such an article. Did the noted author consult real, honest-to-goodness scientific men, or did he consult physicians because of the size or brightness of the sign, the reputation among a few friends who may have had bad judgment, or because of the social position of the doctor or his Chesterfieldian manner. In fact, there are many sidelights that might be thrown upon the picture which might give it a different appearance. However, when all is said and done, doesn't common honesty compel us to admit that the experience of some patients justifies just such a lambasting as given by George Jean Nathan, and what a pity it is that the whole medical profession has to suffer from the faults of a few bombastic, self-exploiting, and incompetent physicians. Coming back to George Jean Nathan, one who has followed his critical reviews and other writings will at once recognize the voice of the cynic and pessimist. Also isn't it a fact that *Vanity Fair* apparently likes the cynical if not sensational along with interesting and entertaining in articles for its readers for the purpose of boosting the circulation?

INDIANA QUACKERY

Hailing from Goshen, Indiana, is a so-called Dr. E. L. Lint, manager of what is advertised as the Nevilla Laboratory, manufacturers of Nevilla, "the greatest intestinal germ and parasite remover known." Lint poses as a specialist on intestinal parasites, and advertises to appear in different towns and cities and at certain hotels where he meets the suckers who bite at his bait. He tells the farmers that they have been paying attention to the worms that kill hogs, sheep, cattle, chickens and horses, but have not been paying enough attention to the parasites that infest the digestive tracts of themselves and their children. He claims to have on exhibition the greatest variety of intestinal parasites ever known, and begs for an opportunity to diagnose cases "iridologically," whatever that may mean. Evidently he is not molested in Indiana, but when he asked for permission to practice his swindling game in Michigan he ran up against a snag, and a friend in Michigan writes us as follows: "Do you allow such birds to prey upon your people in Indiana? Doesn't your Board nab quacks like this one?"

We also learn that Lint received a hot shot from the Michigan State Board of Medical Registration and Examination through a letter which reads as follows:

"Dear Sir:—Your letter to the Secretary of State has been referred to this Board for attention.

"First: Please be advised that under no condition could you obtain a Michigan license.

"Second: You would be amenable to arrest if you made the attempt to do what apparently you are now doing in Indiana.

"Third: You would not have the right to use the title 'Doctor' or 'Dr.'

"My advice is that you make no such attempt in Michigan."

If an inoffensive and fairly well-trained regular physician attempts to practice medicine in Indiana without securing a license, or if he is guilty of any of the minor crimes of the calendar, the chances are he justly will incur the wrath of the Board of Medical Registration and Examination. Why cannot our Board have power to stop such fakers as Lint?

EDITORIAL NOTES

DEAR DOCTOR.

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely free to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve you.

THE January issue of THE JOURNAL was delayed due to the fact that our printers were "flooded" and could not work in their building for a few days.

It is asserted that a quack doctor in a Western city advertises in the lay press that he removes appendices and tonsils, and that he not only cures but aims to please. Why not add, "Tea served every afternoon at four"?

THIS number of THE JOURNAL which contains our editorial on charging the clergyman should be given to some of the Indiana clergymen to read. It may put some clergymen in a different frame of mind concerning gratuitous medical and surgical attention to clergymen and their families.

PHYSICIANS should remember that although they may deduct from income tax returns the expense of attending medical meetings and conventions, including railroad fare, Pullman and hotel bills,

yet they are not permitted to deduct the expense of post-graduate study.

A STUDENT in one of our western medical colleges is reported to have given as an answer to one of the questions in final examination, "This treatment is recommended by our professor but it isn't worth a damn." It is said that the professor, approving of independent thought and action, "passed" the student.

It is reported that in the Forsythe General Infirmary for Children (Boston), ethyl chloride has been administered in over 100,000 cases without any unpleasant results. That is a record that should command the attention of members of the medical profession who may hesitate in the selection of a general anesthetic for minor operations.

WE have called the attention of our readers in previous numbers of *THE JOURNAL* to the value of barbitol, administered an hour before local anesthesia, and we note that in some of the very largest clinics where local anesthesia is employed generally, the practice is to administer barbitol in ten grain doses for the adult an hour before starting the local anesthetic.

ONE of the objectionable and oftentimes disgusting features about radio broadcasting is the tendency to commercialize it irrespective of the trustworthiness of the propaganda sent out. This is especially true as it pertains to the radio bunk concerning patent medicines and quack doctors. There should be some regulation of radio broadcasting whereby medical quackery cannot be exploited.

It is unfortunate that several of the states have defeated bills that if enacted into laws would have permitted judges to select expert witnesses, compensation to be paid by the court, to render unbiased and unprejudiced testimony in cases requiring medical legal testimony. Medical expert testimony never will be trustworthy as long as the compensation for such testimony comes from either prosecution or defense.

It is reported that John D. Rockefeller, now in his ninetieth year of life, has donated six hundred million dollars to various philanthropic enterprises, and he still has several hundred million left. To John D.'s everlasting honor he never has donated money for the purpose of jeopardizing the job of any man whether laborer or professional man. The curse of money is to use it to the detriment of others.

It is refreshing to note that two-thirds of the young physicians graduating from medical schools in the United States during 1929 held

college degrees as well as medical degrees. That means that a very high type of student is offered the medical colleges, and that unquestionably a very much higher grade of medical practitioner will be turned out inasmuch as the training in his academic work has furnished an excellent foundation for his professional studies.

A NATIONALLY known advertising bureau says that advertising will make a success of anything that has merit, and that any organization or any individual that will finance an advertising campaign concerning preventive and curative medicine can be "sold" to the people in carload lots, and quackery will be thrown out of the country. We believe it. But what organization or individual is going to finance an advertising campaign as it should be financed, and who is going to censor the advertising?

WE have had several letters of inquiry from wives of members of the Indiana State Medical Association concerning the possibility of having *THE JOURNAL* sent to the residence rather than to the office of members so that they, the wives, can read *THE JOURNAL*. We shall be very glad to comply with such requests, and really believe that *THE JOURNAL* will be read more by physicians themselves if it is sent to the residence address. If we get the word to change the address we will comply promptly.

How many members of the Indiana State Medical Association have read the announcement at the head of the editorial notes column concerning service to be rendered by *THE JOURNAL* or its representative, the Cooperative Medical Advertising Bureau, in Chicago? In a circular being sent to state medical journals from Chicago, attention is called to the fact that several Indiana physicians have written to the Bureau for help of one kind or another, the inquiry being prompted by the little note that we publish regularly at the head of the editorial notes column. We urge members to take advantage of the offer that is made.

THOSE physicians who regularly prescribe proprietary medicines not recognized by the Council on Pharmacy and Chemistry of the A. M. A., but which perhaps are advertised in one or two state medical journals and most of the proprietary journals for profit gained thereby, and the editors of which should be ashamed of their conduct, will be interested in knowing that probably some of those same proprietary medicines are sent direct to lay persons with full therapeutic indications, of which many are given, and full instructions concerning treatment. Well, they say that a sucker is born every minute, but in the medical profession we sometimes think that two are born every minute!

AN article in the *British Medical Journal* for November 30, 1929 offers a complaint concerning the falling off in recruits in medical colleges as also in the field of medical research work. The reason is not hard to find and is expressed in two words, "no pay." In reality it has gotten to the point in the British Isles where a young man does not elect to practice the profession of medicine nor do medical research work unless he has abundant private means, for the compensation is so niggardly as to keep many students from following what would be their choice if they could have assurance of a reasonable income. What has occurred in the British Isles sooner or later will occur in the United States.

THE Doctors' Service Bureau is an enterprise that thrives in several medium-sized cities throughout the United States. So far as we know the bureaus are entirely satisfactory and a wonderful convenience to physicians. The membership fees are more than paid for by the telephone service rendered, inasmuch as the service bureau follows up telephone calls day or night and locates the subscriber that is wanted. Aside from this the bureau looks after collections, keeps a credit rating list, and does buying for its subscribers with a direct saving in money. The plan is worth adopting in any city, and even works successfully in some towns where there are no more than eight or ten subscribers.

NOTHING is quite as nauseating as the "True-Story" bunk that is sent out over the radio, and if there is any one thing that will put radio in the discard it is the tendency on the part of so many broadcasting stations to commercialize by advertising all sorts of quack doctors, patent medicines, and sex appeal stuff. Some of the national advertisers are quite decent in their commercial announcement over the radio, and the programs that they furnish a listening public are very creditable, but within the last year the rankest kind of harmful commercialism has been so rampant that many radio listeners are becoming disgusted and some of them now refuse to have a radio in their homes.

ONE of the most valuable departments of THE JOURNAL, appearing every month, is that devoted to the work of the Council on Pharmacy and Chemistry of the A. M. A. Not only does the Council give a list of pharmaceutical preparations that have been approved, but it also gives a list of misbranded nostrums and exposes various forms of medical quackery. Therefore, the department is one that should be read every month, as it contains information that should be useful to every practicing physician. We know that there are some very reputable but misguided physicians who are using some nostrums that have been ex-

posed by the Council as pure fakes. Why be duped when you can be protected by the Council reports?

THE Toledo Better Business Bureau has succeeded in putting a notorious advertising quack out of business. The only reason we call attention to this matter is because we fail to find any of the better business bureaus of Indiana taking similar action concerning the bunch of quacks that infest Indiana, and many of whom are practicing medicine without a license. The only exception is the fine piece of work done by the Indianapolis Better Business Bureau in putting a notorious cancer quack out of business. If the merchants would get back of better business bureaus and demand that medical quackery of every description, which takes money out of the pockets of the merchants, be suppressed, there would be a clearing of the atmosphere in Indiana.

RECENTLY we read that a man parked his hunting dog on the rear of his automobile and when he arrived at the hunting grounds he found that the dog was dead, having been killed by carbon monoxide from the exhaust of the motor. He wonders why some of the young flappers and their beaux who take to rumble seats have not suffered the same fate as the hunting dog or at least been affected by the poisonous gases from the motor if the gasoline mixture is poor. Carbon monoxide gas from automobile motors is a real danger, but of course the danger is much more pronounced if the gas escapes in a closed room like a garage and is then breathed. Still it can be very objectionable or even dangerous to persons who are near the exhaust, even in the open air.

FIRST it was the squirrel plague, now it is the parrot's disease, which threatens to be a serious menace to the health of many people. It isn't a bad idea to instill into the minds of the people that household pets often spread an infectious and communicable disease. A good reason for taxing dogs is to cut down the total number of canines so that people who think they must have dogs will consider that the tax justifies taking proper care of the dogs. When it comes to parrots we never yet have seen one that didn't squawk his head off when he was supposed to be quiet, and many an owner of a parrot, to say nothing of the neighbors, has felt more than once that he could wring the neck of the parrot. With parrot's disease as a menace perhaps there will be a little neck-wringing.

IN previous numbers of THE JOURNAL we have pointed out the bad effects and sometimes the dangers attending the use of cocaine and epinephrine in the nose as an anesthetic for operative treatment in hyperthyroid cases. Now we wish to

call attention to a class of patients who inherit a mild hyperthyroid condition but the same has not been recognized, in consequence of which some of the complications occasioned by cocaine and epinephrin anesthesia become troublesome. Some of these patients merely may be nervous or emotional, but in any case the spasmodic or tetanic contractions of the muscles and stiff and separated fingers are exceedingly distressing for the patient. The symptoms are satisfactorily and quickly relieved by the subcutaneous administration of parathyroid extract.

CONCERNING the bacteriology of the tonsils and the relation of tonsils to rheumatism in children, Nabarro and MacDonald, in the *British Medical Journal* of October 26, 1929, come to the following conclusions: 1. Streptococci isolated from rheumatic tonsils do not differ materially from those isolated from non-rheumatic tonsils. 2. This absence of difference fits in with the theory that there is no specific streptococcus which is the cause of rheumatism, but that the condition is due to a hypersensitiveness resulting from repeated small doses of toxin. 3. The tonsil probably is one of the foci from which these toxins may be absorbed. 4. For this reason, in spite of the lack of difference mentioned above, tonsillectomy in rheumatic cases probably is a valuable prophylactic and therapeutic measure.

OUR State Board of Health reports that in November smallpox showed an increase of about 450 percent in Indiana over the same month of last year. That means that a considerable part of the population of the state is not protected against smallpox by vaccination. We do not like to blame the medical profession for anything from smallpox to ingrown toe nails, but in reality we believe that the average physician is not sufficiently active in urging his patrons to have such protective measures as vaccination for smallpox, typhoid immunization, toxin antitoxin injections as a preventive of diphtheria. As has been well stated in the *Journal of the A. M. A.* of January 11, 1930, "It is not the vaccinated community that is giving the United States its present unenviable reputation with regard to smallpox."

AN editorial writer in the *New Orleans Med. and Surg. Journ.* for August, 1929, says, "Remember that the most ungrateful patient is he who owes the most. It is he who will belittle and strike down his benefactor." The writer then goes on to say that the average doctor earns enough but does not collect it, for he is a fairly poor business man. He gives credit to everyone and often prolonged credit. This he should not do. If patients fail to pay their bills and an earnest effort is made to collect them without success, then these debtors should be dropped from the books.

The thought may be expressed in criticism of this suggestion that the doctor cannot afford to lose these patients. If the small retail dealers, among whom competition is keener than in any other branch of business, can do this very thing, then surely the doctor can do likewise.

EVERYONE knows, or should know, that the registered trained nurse has spent considerable time and money in fitting herself for her life's work. Few will consider the fact that the usefulness of the trained nurse is confined to ten or fifteen years, after which she usually is considered a back number or too old for alert service, and finds herself compelled to take up another occupation, perhaps very much less remunerative. Nursing service by one who is well trained for it is very expensive for the patient, and particularly those in moderate circumstances, but we don't see how we can expect to have the kind of service that can be given by the well-trained nurse if she is not to receive decent compensation that is in keeping with the kind of service rendered, and if we take into account the training and the period of activity of the average nurse. What is the answer to the problem?

To be president of a leading American University at thirty years of age is an accomplishment of which any man could be proud, and so far as we know is something that never before has happened until Robert M. Hutchins was made president of the University of Chicago. One must possess outstanding ability to rise to such a height in the esteem and judgment of a board of trustees that always is critical and generally suspicious of youth. The fact stands out as an example to the young college men of today as to what may be accomplished through application, enterprise and character. Some may say that such men are born and not made, but President Hutchins did not reach a high pinnacle at thirty years of age without having traveled the rough and long road of study and application. If he were not deserving of the position he would not be president of Chicago University.

THE U. S. Public Health Service, in a bulletin recently issued, says that tonsillitis is accountable for sixty-six percent of the heart diseases of this country, though the qualifying statement is made that rheumatism, which often goes with heart disease, is a factor, though it, too, is due to a toxic condition which may arise through defective teeth and diseased tonsils. As to the children with defective tonsils, in a survey made, seventeen out of every 100 had rheumatism, and approximately three out of every 100 had heart disease. On the other hand, out of the children with normal tonsils only twelve out of every 100 presented any rheumatic symptoms, and only nine per 1,000 had

heart disease. Thus if we are to prevent rheumatism and frequently occurring heart disease, special care must be given to the removal of the so-called portals of entry such as adenoids, diseased tonsils, and decayed teeth.

THE young physician, fresh from college, starts practice with a serious handicap in view of his limited knowledge of therapeutics and applied pharmacology, and in consequence he quickly and easily becomes the prey of the manufacturer of proprietary pharmaceuticals or ready-made prescriptions to suit every kind of pathology. As proof of this examine the prescription files of any busy prescription druggist. Not alone is prescribing made easy by the specialty manufacturers, but refilling of the prescription without the intervention of the physician also is made easy whether there are any indications for the prescription or not. Materia medica and therapeutics in many medical schools is a subject given scant consideration, and it is a pity that such is the case. An intimate knowledge of a few drugs and chemicals and how to use them intelligently would make for better practitioners of medicine.

A FEW weeks ago the lay press carried a news item to the effect that there were twenty or thirty cases of diphtheria in an orphans' home. To our notion it is bad enough to have children in private homes unprotected from diphtheria through the relative safety that comes from the toxin-antitoxin injections, and in the case of an orphans' home presumably under constant medical supervision, it seems to us that it is almost criminal carelessness not to have had those children immunized. When so many other states are stamping out diphtheria through campaigns to immunize all children of school age, we in Indiana are behind the procession and it does not speak well for us. The State Board of Health should get busy, and the medical profession of the state should get squarely back of the State Board of Health in efforts to stamp out those communicable diseases that are prevented by vaccination or immunization of any kind.

A classified telephone directory is a fake unless every person entitled to recognition in such a directory is listed whether he pays for it or not. Within recent years some telephone companies have attempted to reap a rich harvest by getting out a classified directory and including a listing, if paid for, but omitting it if not paid for, at profitable advertising rates. In some cities telephone companies have attempted a virtual hold-up game on the medical profession by getting up special listings and special classifications, to which all of those who pay for the advertising are given recognition. The worst feature of such a directory is that the quack doctors are the ones who are given the most prominence because they

pay the most for it. We believe that the medical profession, as a profession, should put its stamp of disapproval upon all of these commercial schemes and insist that any listings of physicians shall be complete or that no listings of physicians will be made except such as every telephone subscriber receives.

THE British Medical Association will hold its 1930 session in Winnipeg, Canada. Already great preparations are being made for the session, and the social features will be unusual in character. Something that aroused our interest was the fact that arrangements are being made for a fishing expedition for all of the English physicians who care to try their luck with rod and line. The English physician is a born sport, and there are few of them who are not proud of their piscatorial accomplishments. The region about Winnipeg will afford them some excellent sport as we know from experience. When the A. M. A. met in Portland this year, something might have been done toward giving the A. M. A. fishermen an opportunity to enjoy their favorite sport, but so far as we know nothing was said about fishing, and if so we shall regret all our lives that we did not take advantage of any opportunity offered by our hosts. It is a peculiar doctor who does not spend some time with rod and line as an occasional relief from the grind of professional work.

THE editor of the *Delaware State Medical Journal* for July, 1929, in discussing the subject of careless work, has the following to say: "Malpractice claims and suits against physicians are increasing. Several factors are responsible for this, among which may be noted the craze for quick and easy wealth; the assumption that physicians guarantee their work; the presence of the ambulance chaser and the contingent fee lawyer; the nurse or interne who knows little but talks much; the occasional carelessness, neglect or incompetence of the physician himself; and the vituperation of the quacks and cultists. But all of the above items cause only a small minority of the claims. By far the majority of such suits are due to some remark passed by another physician, presumably ethical and generally a member of the county medical society in good standing. In fact, it has been asserted that every malpractice case has two physicians back of it: the physician being sued and the physician whose thoughtless or intentional remarks stirred up the trouble."

THE *Survey-Graphic*, for January, in a number of articles by members of the medical profession and lay public discusses the subject of the cost of medical care. While the purpose seems to be to arrive at conclusions as to how the cost of medical care can be reduced, it is all too evident that there is inconsistency in much of the argument when

reduction of the cost of medical care is to a considerable extent placed upon the shoulders of the medical profession. Physicians are to blame for encouraging a great deal of unnecessary expense in caring for the sick, and altogether too often the fact that the cost of skilled services of the physician forms but a small part of the cost of illness in the majority of instances, is lost sight of entirely, and in the scaling down process physicians are expected to take a slash in income in order to meet the popular demand for a lowering of the cost of illness. Why not ask others who are furnishing necessities, and not one of whom ever loses any money no matter to whom the services or products are given, to take a slash?

ACCORDING to *Time*, December 23, 1929, some of the great men of the world, present and past, have been able to talk of "my operation." Prostatic hypertrophy has been the peccating ailment, and it has affected prominent men like Prince Bismarck, President Wilson, President Harding, "Tiger" Clemenceau, Napoleon III, Alexander Dumas, Dictator-President Hipolito Irigoyen (of Argentine), President Poincare, King George, President Doumergue of France, President Masaryk of Czechoslovakia, King Haakon of Norway, and King Fuad, of Egypt. *Time* then goes on to say that the affection is a common ailment of elderly men, most authorities estimating that one out of three males over sixty suffer from the affection. A famous genito-urinary specialist then is quoted, who says that four out of five males have had gonorrheal infections, and that gonorrhea in early manhood is the most frequent cause of prostatic hypertrophy. Some of the prominent men who have had or do suffer from prostatic hypertrophy may object and at once will be wondering if the public is counting them among those who have sowed wild oats in youth!

NOT infrequently there arises a question as to the legal liability for medical and surgical services rendered in an emergency or at the request of a person other than the patient. A well-to-do father may request a physician to attend a sick daughter, not a minor, and refuse to pay the bill on the ground that he is not liable. It should be remembered, as pointed out in the legal department of the *New York State Journal of Medicine* for July 15, 1929, that a physician may recover if he has a special contract covering liability, or he may recover upon an implied agreement to pay for his services when they have been rendered at the request of the patient or of a person who, in the eyes of the law, is regarded as being under legal obligation to provide such professional services for the patient, such as a husband or the parents of a minor child. The attention of the medical profession is called to a court opinion which reads as follows: "It would be a simple matter

in cases where the physician is called upon to attend a person at the instance of someone not standing in a responsible relation to the patient to inform himself as to whom he shall look for his compensation."

THE Nebraska State Medical Association has a very thorough and comprehensive system pertaining to health examinations and the dissemination of health information to the public. The association also is sponsoring and giving active assistance to the various activities which have to do with health promotion. This includes the periodic health examination, the preschool examination of children, the baby shows and health examinations at county and state fairs, and the various health clinics of welfare organizations and other interests. In fact it is the aim of the state medical association absolutely to dictate and control all health activities in the state of Nebraska, and in consequence nothing is heard of Christian Scientists, chiropractors, and Red Cross or school nurses in connection with the practice of medicine. Nebraska's example could be followed with profit by other states, and particularly by Indiana. This can be done as a contribution to the welfare of the state, and without exploitation of any individuals. It should be backed by the whole profession, and health movements of whatsoever kind or nature should either originate or be sponsored or approved by the state medical association.

A SWINDLING game that recently has been worked on Indiana physicians is for a man, ostensibly a workman, to have an examination or some professional services rendered by a physician, and to tender in payment a pay check for double or quadruple the physician's fee and receive cash for the difference. The pay check proves to be fraudulent. It is a good thing to find out whether pay checks or personal checks are perfectly good before any effort is made to cash them. In one instance where a comparative stranger presented a check to the editor of *THE JOURNAL* and asked for a cash difference between the amount of the fee for professional services and the amount of the check, the patient was advised courteously that inasmuch as he was a stranger an investigation as to the validity of the check would be made. Had the patient been honest he would not have objected to such a course, but being a swindler, he manifested some temper and suddenly left the office, taking the check with him. Subsequent investigation showed that the fellow really was a swindler and had been practicing his game upon merchants and professional men. Those who are honest will not take offense when you take measures to establish their honesty.

THOSE suffering from septic nasal conditions, including the common cold, should not be allowed

in public baths. Not only do they spread infection, but any water entering the nose may carry infection backward into the nasal accessory sinuses and the eustachian tubes. Swimming is dangerous in the same way as the pernicious habit of sniffing salt water up the nose to relieve the common cold. Patients who have a perforated tympanic membrane often ask whether bathing is permissible. Whether or not there is discharge, the answer should be an emphatic *no*. Those in whom the discharge has ceased almost certainly will become reinfected, with consequent exacerbation of old trouble, whereas those with an active discharge will contaminate the water and lay themselves open to the risk of added virulent infection and acute symptoms supervening on the chronic. If those with a hole in the drum will go in swimming, then an attempt should be made to keep the water out of the external meatus by putting a small piece of wool impregnated with vaseline in the meatus and then covering the whole with another piece of wool which is kept in place with collodian. — Daggett and Cove-Smith, *British Medical Journal*, August 17, 1929.

ON January 1st the Associated Press announced that the average salary at Harvard, Yale, Ohio State, Michigan, Illinois, Wisconsin and California University was as follows: Executives, \$6,904; professors, \$5,218; associate professors, \$3,895; assistant professors, \$3,004. Education, culture and refinement does not count for much on a dollar-and-cents standard. A pugilist, uneducated and uncultured, or a slapstick comedian can make hundreds of thousands of dollars a year. Big business can pay for talent, but not of the kind that makes presidents and professors of universities. Great scientists and men of letters for the most part have lived and died in moderate circumstances, some of them even dying in poverty. Few physicians, even great ones, have got anything more out of life in a pecuniary way than a comfortable living. However, when all is said and done, perhaps those who have been relatively poor throughout life, but at least had the comforts of life, have contributed more to civilization and are far happier than those who perhaps have secured fortunes figuratively speaking at the turn of the dice. Nevertheless, it is a little discouraging to know that one representative of big business uttered a truth when he said that "brains are the cheapest things we have to buy."

DR. GEORGE E. FOLLANSBEE, in a well-written article in the January *Survey-Graphic*, says that no one knows just how much is spent by families for patent medicines, but the family practitioner in his contact with the families believes the amount will approximate closely that paid for doctors, especially in the country where people are more inveterate patent medicine takers than in the city.

Nothing has been said about patent medicine as a factor, but as self-prescribing of patent medicines is generally not only useless but often absolutely harmful, it is a conservative statement to say that the elimination of patent medicines would reduce materially the burden of the cost of medical care.

It is a curious inconsistency that while publishers know that patent medicines and all the so-called "wonderful discoveries" reputed to cure all manner of diseases are worthless if not absolutely harmful, and the sale of which would die if it were not for advertising, yet these publishers continue to take the ill-gotten gains from such advertising and then turn around and attack the medical profession for the high cost of illness. As we often have said before, here is a chance for a little counteracting advertising on the part of better business bureaus, boards of health, and the medical profession.

UNQUESTIONABLY there are reputable medical societies that carry on their membership rolls the names of some men who are unethical and disreputable in many ways, but it is difficult or impossible to get rid of them. They know they are hanging by their finger tips, so to speak, so they pay their annual dues promptly and do everything possible to prevent losing membership. It is easy enough to get them into a reputable medical society, but it is a hard thing to get them out. On the other hand, we are satisfied that there are a few qualified, honorable and ethical physicians who are kept out of reputable medical societies through medical, social, financial, or political pull, and such a condition of affairs is not creditable to our medical organizations. We have in mind be very desirable additions to any reputable medical society, and yet for trivial reasons, and the power that a few men have in controlling the destinies of certain medical organizations, these worthy practitioners of medicine are kept out of organized medicine. Despite this these outcasts seem to be doing exceedingly well, are entitled to and have the respect of the public, and their conduct is far superior in every way to that of some of their traducers. What a pity that personal animosity goes so far in making some medical men inconsistent and unreasonable.

A PENNSYLVANIA surgeon who performed several abdominal operations that resulted in saving a woman's life presented the husband of the patient with a bill for three thousand dollars, payment of which was refused. The lower courts awarded a judgment for the full amount with interest, and the supreme court of the state finally affirmed the judgment a few years after the services were rendered. The testimony indicated that the surgeon on two previous occasions had done

as much work on other individual patients without receiving compensation of any kind whatsoever owing to the inability of the patient to pay. It also was shown that the husband of the patient for whom services were rendered was amply able to pay a three thousand dollar fee. In rendering the opinion the court, in part, said: "The law must recognize that physicians should not have their services valued as you would commodities in trade by fixed standards. What would be a proper charge for the same service to one man fully able to pay would be excessive to the man of limited means, and what would be done willingly for the indigent without thought of financial reward should be compensated for by one who can afford to pay on the scale which doctors of repute measure as the proper one. Only on such a basis can those who devote their lives to ministering to human suffering in some degree be paid fairly."

THE president of one of our large national societies says that his position inflicts a penalty, inasmuch as he is expected to give his moral and financial support to a variety of the enterprises of alleged benevolent or scientific value to the profession or public. If he doesn't contribute he is thought to be stingy and unprogressive. No man should be expected to contribute more than his share of anything simply because he has been honored by his associates or confreres, and yet sometimes those interested in certain projects lose all sight of consistency. A friend tells us that for years, or while living in a very modest home, he never was bothered by people considering him as well-to-do. When his family increased so that it became necessary to secure new and larger quarters and he went into debt for a more pretentious home, immediately he was rated as being financially more prosperous than really was the case, and the demands upon his pocketbook increased in number as well as in the amounts solicited. The only way he could pacify those making demands for worthy as well as unworthy projects was to say, "My banker knows that I am heavily in debt and that I have great difficulty in meeting even interest payments. If he will tell you that I can afford to contribute to your cause, then I will give you something and expect my banker to loan the money until I can pay it back to him."

AN old physician in the southern part of Indiana made a will and named his nearest and dearest friend as executor. The will was made many years ago and subsequently there was considerable change in the economic positions of the two men. The physician had accumulated a comfortable competence whereas his friend had met with financial reverses. Death came to the physician and the friend took up the duties of an executor. That he did not fulfill his obligations in a creditable way is evidenced by the fact that inside of one

year the estate that he was administering became hopelessly involved as a result of unwise investments and the intermingling of the business affairs of the executor with those of the estate. As a final result the physician's widow found herself with not sufficient income upon which to live, and she now is dependent upon relatives and friends. Such a story could be duplicated many times in the history of wills and the administration of estates. The physician who is wise will make a will and have the best lawyer in his community draw it for him. Most important of all he will name an executor, *and that executor should be the best bank or trust company in his vicinity.* The law fixes compensation which an executor shall receive, and any first-class trust company, or the trust department of any first-class bank will look after an estate better than any individual and at much less expense. Best of all the provisions of the will will be carried out and the estate will be safe.

ALL joking aside, we think doctors are pretty swell guys. They do more good than harm, which is something you can't say with confidence about such other professionals as lawyers, preachers, senators and editorial writers. They constantly strive, by prevention, to put themselves out of business. They share with firemen and telephone trouble-shooters that amazing willingness to roll out of bed in the middle of the night and get on the job. Good manners are a part of their routine. They change their minds and methods with graceful alacrity. They temper their fees to the shorn purse and soak the rich. As golf partners they are useful because you usually can get them in the afternoon. They do not have the annoying habit of practicing what they preach.

One thing and only one we hold against them. Medical ethics, so called, are a nuisance and a menace. Insofar as the code is directed against quackery, fee-splitting and disregard of the Hippocratic Oath, it is all to the good. But as applied by various medical associations, the code creates a combination in restraint of health. It prevents one doctor from telling a patient the truth about the bungling of another. It tends to rule out new discoveries if made by men who do not play the game. And it is all too often invoked against doctors who seek, through writing or lecturing, to help along the popularization of medical knowledge. The dangerous talk about a "medical trust" will not be silenced until there is a drastic overhauling of medical ethics.—*Judge*, Jan. 18, 1930.

AN Indianapolis general physician who is reputed to be very busy as well as prosperous says that he quite agrees with us in the statement that the majority of the physicians are cutting their own throats by recommending or even approving

the frills with which the ordinary sick person surrounds himself. He says that he tells women patients in moderate circumstances that they can have their babies at home, and even with a practical nurse which he finds sufficient, and that the expense is far less than at a hospital. A confinement case at home permits the attending physician to obtain a decent fee that he otherwise might lose. He also says that he doesn't keep surgical cases in the hospital merely as a convenience to himself, but sends them home as soon as it is safe for them to be moved, which practice permits the patient to pay the physician for his visit at the home instead of paying twice as much for the hospital care and have nothing left for the physician. In short, it is his idea that nowadays the average sick person expects and receives not only a good deal of superfluous attention, but more expensive attention than is required in order to secure equally good results. In consequence the sick person pays out more money than he should, and the attending physician oftentimes gets little or nothing, whereas if the extra and unnecessary attention is cut out the physician could be paid. He claims that his income has doubled since he adopted the plan of rendering more service at the home of the patient, and that his patients have been saved money without the slightest loss of efficiency and service.

NEW YORK'S new public welfare law went into effect on January 1, 1930. Some of the features of the new law is said to be that which enables local communities to see that no one of their number, even though not destitute, lacks medical and hospital care which is needed but the cost of which cannot be afforded *in the opinion of the individual or his family*. That there will be abuses under this law is undoubted, though the welfare and social service workers who believe that society through the community or the state owes to the individual even more in the nature of medical service than in the provision for other necessities of life, are strong for the law, and they indicate, as pointed out by the *Ohio State Medical Journal*, in its November number, that medical care is a public function to be provided to all citizens who care to take advantage of it. The question then is asked, "Why not start at the foundation of the entire problem by socializing *all* necessities of life, and especially those constant ones whose cost may be more uniformly anticipated, for why is there so general an objection against health costs to the individual and no such concerted objection to the cost of other necessities. If it is a consistent government policy to provide medical service generally, is it not equally consistent as a governmental and social proposition to have out and out socialism or communism?" The editor then concludes by saying, "As has been so frequently observed, many welfare agencies constantly are

attempting to make medical charity or state medicine both more general and more readily acceptable. Thus is created a new attitude toward medical service, and thus is established a formidable sentiment toward socialization of medicine, and indeed all types of personal service in the gradual broadening field of public welfare to the possible creation of pauperism and destruction of personal pride, personal initiative and personal responsibilities."

THIS is the open season for acute anterior poliomyelitis, and while we do not dread the disease as we did a few years ago, yet it is well for every physician to be on his guard, both as to recognition of the disease as well as the treatment that should be employed. Of especial importance is the recognition of the unquestioned value of convalescent serum in the treatment of poliomyelitis. As pointed out in the *International Medical Digest* for July, 1929, the difficulty in obtaining convalescent serum has been lessened and to a large extent overcome through the practice in most medical centers in the world in keeping a list of convalescent patients who can be drawn upon to offer blood when the occasion arises. Last year the Rockefeller Foundation in New York City distributed a large quantity of convalescent serum, and no doubt this year there will be a repetition of the service. However, such service should be rendered by the medical centers of any large city. There is one thing that should be borne in mind, and that is that in order to be effective, convalescent serum must be administered as early as possible. In fact, it is considered to be almost valueless after the fourth day following the onset of the very first symptom. The diagnosis of poliomyelitis, therefore, should be made in what is spoken of as the pre-paralytic stage. Every physician should be familiar with the symptoms, which are typical in the first few days of an impending poliomyelitis. A study of the chapter on acute anterior poliomyelitis, written by Dr. H. L. Amoss, who probably has contributed more to the study of this disease than any other single individual, and found in the Three-Fold Medical Service, has supplied the information in a comprehensive and appropriate form. After acquiring this knowledge, the physician who anticipates a few cases of poliomyelitis during the season should determine if there are any convalescent individuals near him from whom he can obtain serum on short notice. The blood of these individuals should be typed, and a Wassermann should be obtained. This will overcome, to a large extent, the usual difficulty which applies to all convalescent sera. Every effort should be made to diagnose poliomyelitis in the pre-paralytic stage in order that convalescent serum, which is the only serum containing neutralizing antibodies for the virus of the disease, can be used.

THE American Federation of Musicians is making a plea through the public press for support of a demand for good music in our moving picture houses and theaters. The specious plea is made that at present the theaters and moving picture houses for the most part are furnishing nothing but "canned" music, and that the American public and in particular the rising generation deserves something more than mechanical music. The truth of the matter is that the American Federation of Musicians has "killed the goose that laid the golden egg," for never in the history of unionism has there been any union that has been more tyrannical and destructive in its policies than the Musicians' Union. It demanded and from sheer strength was able to force employers to accept dictation as to wages, hours, methods of employment and personnel of employment, exactions that were not only tyrannical but oftentimes ruinous to employers. In self-defense the theaters first cut out the orchestras altogether except when the play on the stage required music, such as a musical show or opera, and the theater owners withstood the blackguarding and picketing which ensued as a result of their action. The Musicians' Union could not see the "handwriting on the wall," and continued their tyrannical control of the music situation as it pertained to the entertainment of a pleasure-loving public. The last stroke in opposition to the tyranny of the Musicians' Union was the banishment of orchestras from the movie houses, and, figuratively speaking, the goose that laid the golden egg for musicians was killed. Now the musicians are not so cocky and dictatorial, and as the old saying goes, are quite willing to eat out of the hand of those who will offer encouragement and support.

We always have felt that unionism was responsible for better wages and a higher standard of living for the average mechanic, but when unionism leads to oppression and tyranny, it cannot hope to live nor does it deserve to live. Never in the history of the world have employers of labor realized as much as they do now the necessity of dealing fairly and generously with laborers, but employers of labor are not for long going to be compelled to accept tyrannical dictation that spells financial ruin for them. Canned or mechanical music in the moving picture houses and theaters may not suit the American Federation of Musicians, but evidently the American public, which is willing to pay generously for entertainment, is satisfied, and perhaps for the reason that the existing condition offers a better selection of music and an exposition of more real professional ability than was found in many theaters and moving picture houses when orchestras so often murdered music or substituted atrocious "jazz" in almost every class of entertainment.

SECRETARIES DEPARTMENT

Have you collected all your dues?

If you have then you can fix up your income tax return. In the *Jour. of the A. M. A.*, January 11th, page 128, you will find some very useful information on income tax; be sure to consult this article; get all this done so you will be able to attend the meeting in Chicago this spring. I am going to get Tom to help set the date. I think it should be in April. What do you think about this date?

Remember the legislature meets in 1931. Get your members to thinking about who will represent you in the next legislature. We need some strong men there to keep things as we have them. Remember that Dr. Hewitt will not be there.

I see the Madison County Society has had a meeting for the ladies. They have appointed an entertainment committee for every meeting in 1930. They have established a credit reference with the physicians' exchange. This is an excellent feature and should be adopted all over the state.

The Vigo County Society met this month and crowned the king of suckers. This crowning followed a minstrel show. The new king was surprised, and "a good time was had by all." Why don't some of the other societies report some of their doings!

Did you know James Eads Howe, "the millionaire hobo," was an M.D.? His life is interesting.

What do you know about graphology? Do you know that California had 302 deaths from meningitis in 1929? So says the *A. M. A. Journal*.

How many of you have started your cars in a closed garage these cold days? Foolish business.

How many societies are going to be in the 100 percent column?

Dr. Wishard is doing some fine work on publicity. He is putting out some real information about the Koch cancer cure. Be careful and stay away from this man.

Make your plans for the secretaries' meeting in Chicago in the spring.

See you next month.

A. M. MITCHELL, Chairman.

MEDICO-LEGAL DEPARTMENT

By ALBERT STUMP

ATTORNEY FOR INDIANA STATE MEDICAL ASSOCIATION

Question: What is the law in regard to compensation under the Workmen's Compensation Act and the payment of physician's fees by insurance companies operating under that Act, where the question of occupational disease or accidental injury is involved?

Answer: Under our compensation act the employer is required to pay "compensation for per-

sonal injury or death by accident arising out of and in the course of employment." 1926 Burns, Section 9447.

Upon accepting the provisions of the Workmen's Compensation Act, which the employer is presumed to do unless he follows the procedure provided in the Act itself to reject it, the employer must do one of two things to make certain the payment of the compensation that might be required under the Act. That is, he must obtain a certificate from the Industrial Board of authority to carry his own risk, or he "shall insure the payment of compensation to his employees and their dependents." 1926 Burns, Section 9450.

The legislature, in Section 9521, Clause D, further defines the words "injury" and "personal injury" as used in the Act as follows: "Injury and personal injury shall mean only injury by accident arising out of and in the course of the employment and shall not include a disease in any form except as it shall result from the injury."

Among other requirements of the employer is that he must furnish "free of charge to the injured employee, an attending physician for the treatment of his injuries, and, in addition thereto, such surgical, hospital and nurses' services and supplies as the attending physician for the Industrial Board may deem necessary." 1926 Burns, Section 9470.

In Section 9518, the form of the insurance policy is prescribed and it covers the payment of "all benefits conferred by the Indiana Workmen's Compensation Act, including physicians' fees, nurses' charges, hospital services and hospital supplies."

The liability of the employer under this Act is for compensation for personal injury or death by accident arising out of and in the course of the employment.

The question as to what are injuries arising out of and in the course of employment assumes some very difficult forms. In *Wasmuth-Endicott Co. vs. Karst*, 133 N. E. 609, the Indiana Appellate Court held that a workman's disability from typhoid fever contracted by drinking polluted water furnished him by his employer for that purpose while in its employ, was compensable as an injury arising out of and in the course of his employment, and the court adopted in that case the definition of the word "accident" which had been applied by our Supreme Court in many cases outside of the scope of the Workmen's Compensation Act. That definition is "an accident is any unlooked for mishap or untoward event not expected or designed."

The course discussed whether or not the taking of the typhoid germs was an accident according to that definition and reached the conclusion that it was. Then the question arose as to whether the results which followed properly came within the definition of personal injury. It adopted the definition of injury of the Massachusetts Supreme Court, which is, "In common speech the word

injury as applied to personal injury to human being, includes whatever lesion or change in any part of the system produces harm or pain or a lessened facility of the natural use of any bodily activity or capacity." Applying this definition the court said that if the typhoid bacillus was accidentally taken into the intestines and there set up an inflammation causing typhoid fever the individual sustained an injury within the meaning of the Workman's Compensation Act.

The following have been held to be personal injuries within the Act: Inhalation of damp smoke and drenching with water resulting in lobar pneumonia, lobar pneumonia resulting from amputation of fingers, paralysis resulting from rupture of blood vessel from unusual heat and over-exertion of an employee who had had arterial sclerosis for two years, ivy poisoning, breaking of artery in brain as a result of inhalation of carbon monoxide. It will be seen from these illustrations that diseases may come within the definition of personal injuries if their origin can be said to be accidental.

Occupational diseases are not compensable for the reason that they cannot be said to be accidental.

In *Moore vs. Service Truck Co.*, 142 N. E. 19, it was held that a workman could not recover on account of a diseased condition caused by the breathing of dust from grinding with emery wheels. This grinding caused the air to become laden with emery and metallic dust which was breathed by the workman and resulted in sickness and disability. The workman knew that those working in the dust-laden air for any considerable period of time were injured, but the court said that the illness from which he was suffering was the natural result of his occupation and was not the result of an accident. The court dwells in its opinion upon the fact that the taking of the dust into the body was both foreseen and realized by the workman in this case from day to day and that he was aware of its evil effects upon his health. These facts, the court says, distinguish this case from the *Wasmuth-Endicott vs. Karst* case in which the taking of the germs of typhoid into the body was unintentional and unknown at the time, and resulted in an injury which was unexpected.

The same result was reached in *Meade, etc., Corp. vs. Starnes*, 147 Tenn. 362, where a workman became ill from breathing air impregnated with dust arising from a chemical used in the business. The court said, "We cannot conceive that the breathing of dust caused to arise necessarily from the very work being performed has in it any element of accident."

Occupational disease, that is, disease caused by continued exposure to the ordinary and known risks of the employment, do not come within the benefit of the law; and in such cases the physician cannot recover his fees from the employer or his insurance carrier. It has been the policy of the

law to deal separately with industrial injuries and occupational diseases. Whatever the social requirements have become in the meeting of those conditions arising from and natural to certain occupations would properly be the subject of legislation if the needs are sufficiently grave.

DEATH NOTES

C. K. EWING, M.D., of McCordsville, died January 19th, aged sixty-eight years. Dr. Ewing graduated from the Medical College of Indianapolis in 1884.

L. B. BITZ, M.D., of Evansville, died January 1st, aged ninety years. Dr. Bitz graduated from Miami Medical College, Cincinnati, in 1869.

CHRISTINA KUNTZ, M.D., of Berne, died January 15th, aged sixty-eight years. She had practiced medicine at Berne for forty-three years.

HENRY N. COONS, M.D., of Lebanon, died December 17th, aged seventy-six years. Dr. Coons graduated from the General Medical College, Chicago, in 1863. He had practiced medicine in Lebanon for forty years.

A. P. BROWN, M.D., of Princeton, died December 25th, aged seventy-four years. Dr. Brown was a member of the Gibson County Medical Society, the Indiana State Medical Association and the American Medical Association.

J. H. LYONS, M.D., of North Webster, was found dead in his office January 16th. Dr. Lyons was seventy years of age. He graduated from the University of Michigan Medical School, Ann Arbor, in 1884, and was a member of the Kosciusko County Medical Society, the Indiana State Medical Association and the American Medical Association.

OLIVER L. FISHER, M.D., aged thirty-eight years, died January 10th, following a two months' illness from rheumatic fever and chronic myocarditis. Dr. Fisher had been affiliated with Easthaven, the Richmond State Hospital, for two years. He graduated from the Indiana University School of Medicine in 1923. During the World War he served in France for sixteen months. Dr. Fisher was a member of the Wayne-Union County Medical Society, the Indiana State Medical Association and the American Medical Association.

NEWS NOTES AND PERSONALS

DR. HAROLD S. HATCH, of Indianapolis, addressed a group of physicians at Elwood, January 7th, on "Hay Fever."

DR. B. F. PENCE, of Columbia City, recently was made health officer of Whitley county, to succeed Dr. E. V. Nolt.

THE Madison County Medical Society and the Grant County Medical Society held a joint meeting in Anderson, January 21st.

THE annual congress on medical education, medical licensure and hospitals will be held at the Palmer House, Chicago, February 17, 18 and 19.

DR. MORRIS FISHBEIN, editor of the *Journal of the A. M. A.*, talked on "The Prolongation of Life" at the Kirshbaum Center, Indianapolis, January 19th.

DR. JOHN W. IDDIGS, of Crown Point, has been made county health commissioner for Lake County. Dr. Iddings succeeds Dr. A. G. Schlieker, of East Chicago.

DR. ARTHUR FLETCHER HALL, JR., has announced the opening of offices in the Wayne Pharmacal Building, Fort Wayne. His practice is limited to skin diseases and syphilis.

DR. CURRAN POPE, of Louisville, Kentucky, presented a paper on "Diseases of the Gall Bladder and Their Treatment" at the January 7th meeting of the Muncie Academy of Medicine.

DR. WALTER C. VANNUYS, medical director of the Indiana Village for Epileptics, presented an address on "Various Types of Epilepsy" at the January 14th meeting of the Muncie Academy of Medicine.

DR. B. R. KIRKLIN, formerly of Muncie, Indiana, has been made chief of the x-ray department of the Mayo Clinic, at Rochester. Dr. Kirklin has many friends in Indiana who will be pleased to learn of his success.

ON and after February 1, 1930, the Victor X-Ray Corporation will be known as the General Electric X-Ray Corporation, it has been announced. The trade mark "Victor" heretofore used will be retained.

THE International Congress of Physiotherapy will meet at Liege, Belgium, from the 4th to the 8th of September, 1930. William B. Snow, M.D., 1650 Broadway, New York City, is president of the American Section.

DR. STEPHEN A. DOUGLASS has resigned as superintendent of the Marion County Tuberculosis Hospital at Sunnyside. A new superintendent has not yet been selected. Dr. William McQueen is acting superintendent in the interim.

DR. M. R. COMBS, of Terre Haute, who has had an infected knee for some time, finally had to have his leg amputated, January 11th. At the time of going to press, Dr. Combs was recovering nicely and hopes to be able to return to practice.

THE second issue of *The Hebrew Physician*, the only Hebrew medical journal published outside of Palestine, recently has come from press. Any physicians interested in this journal may communicate with the *Hebrew Physician*, 983 Park Avenue, New York City.

THE Indianapolis Medical Society held its regular weekly meeting January 28th at the Athenæum. Dr. J. J. Littell presented a paper on "Chronic Sinusitis, with Particular Reference to Respiratory Infection" and Dr. Charles P. Emerson presented a paper on "Non-Tuberculous Parenchymatous Diseases of the Lungs."

DR. F. S. CROCKETT, of Lafayette, has been appointed a member of the State Board of Medical Registration and Examination, to succeed Dr. E. M. Shanklin, of Hammond. Dr. Shanklin served for a number of years, and for the last two years was secretary of the Board. Dr. William R. Davidson, of Evansville, is present secretary of the Board.

THE U. S. Civil Service Commission announces open competitive examinations for Occupational Therapy Aide (Arts and Crafts); Occupational Therapy Aide (Trades and Industries) and Occupational Therapy Pupil Aide (Trades and Industries). Applications for these positions must be on file not later than March 12, with the Civil Service Commission at Washington, D. C., from whom complete information and application blanks may be obtained.

AT the January 7th meeting of the Fort Wayne Medical Society, Dr. M. B. Catlett presented a paper on "The Functional Treatment of Fractures." On January 14th the society held a dinner meeting, after which Dr. William Englebach, of Santa Barbara, California, spoke on "The Relation of the Endocrines to Growth and Development." At the January 21st meeting, Dr. Walter M. Simpson, of the Miami Valley Hospital, Dayton, Ohio, presented a paper on "Tularemia."

OFFICERS of the Indianapolis Medical Society were installed at the annual dinner meeting held January 7th. The new officers are Dr. J. A. MacDonald president, Drs. M. Joseph Barry and Harry J. Weil vice-presidents, Dr. Chester A. Stayton secretary, and members of the council: Drs. L. A. Ensminger, J. W. Ricketts, J. M. Cunningham, R. M. Moore, J. W. Carmack and Harry L. Foreman. Certificates of service were presented

to Dr. L. D. Carter and Dr. M. N. Hadley, past presidents of the society.

THE U. S. Civil Service Commission announces open competitive examinations for medical officer, associate medical officer and assistant medical officer, applications for which positions will be rated as received by the Civil Service Commission at Washington, D. C., until June 20th. Examinations are to fill vacancies in hospitals of the Veterans' Bureau, Public Health Service, Indian Service and in other establishments of the Federal classified service throughout the United States. Full information may be obtained from the United States Civil Service Commission at Washington, D. C.

MANY subjects are listed on the program of the First International Congress on Mental Hygiene, which will be held at Washington, D. C., May 5 to 10, 1930. Topics are now ready for publication, and are contained in a thirty-three page preliminary announcement which may be obtained from the headquarters office, 370 Seventh Avenue, New York City. President Hoover has accepted the honorary presidency of this Congress, and delegates are expected from more than thirty countries. The American Psychiatric Association and the American Association for the Study of the Feeble-minded will hold their annual meetings in Washington at the same time as this Congress. Information and preliminary announcement may be obtained by writing to the secretary, John R. Shilliday, at the address mentioned above.

ELIGIBLE organizations and colleges which have not yet done so are urged to send for credential blanks so that a representative may attend the convention for the Revision of the Pharmacopeia of the United States of America, which will be held in Washington, D. C., May 13, 1930. Credential blanks may be obtained from the Secretary of the Convention, Lyman F. Kebler, M.D., 1322 Park Road, N. W., Washington, D. C. The board of trustees have asked that credentials be filed with the secretary of the convention by March 14, 1930. Those entitled to send delegates are incorporated medical colleges, and medical schools connected with incorporated colleges and universities, incorporated colleges of pharmacy, incorporated state medical associations, incorporated state pharmaceutical associations, the American Medical Association, the American Pharmaceutical Association, the American Chemical Society, etc., provided that the organization has been incorporated and in continuous operation in the United States for at least five years before time fixed for the decennial meeting of this corporation.

IN addition to the articles already enumerated, the following have been accepted by the Council

on Pharmacy and Chemistry of the American Medical Association:

E. Bilhuber, Inc.:

Lenigallol-Zinc Ointment.

Cutter Laboratory:

Scarlet Fever Streptococcus Antitoxin-Cutter.

Mead, Johnson & Co.:

Mead's Viosterol in Oil 100 D.

H. K. Mulford Co.:

Ampules Sodium Cacodylate-Mulford, 3/4 grain, 1 cc.

Ampules Sodium Cacodylate-Mulford, 3 grains, 1 cc.

Ampules Sodium Cacodylate-Mulford, 5 grains, 1 cc.

Winthrop Chemical Co., Inc.:

Tablets Tutocain No. 6.

The following article has been exempted and included with the List of Exempted Non-medicinal Articles (New and Non-official Remedies, 1929, p. 485):

Child Welfare Guild, Inc.:

Bite-X.

INDIANA UNIVERSITY NEWS NOTES

FLOYD A. PEYTON, a post-graduate student at Indiana University and an assistant in the quantitative analysis section of the chemistry department, has accepted an appointment at the University of Michigan, where he will work with Dr. M. L. Ward, of the Michigan School of Dentistry, in the study of special metallurgy of dental alloys. This work is fostered by the A. P. Fox Company of Indianapolis.

BIDS for the construction of Indiana University's new chemistry building will be considered by the I. U. board of trustees at their February 17th meeting at Indianapolis, according to John W. Cravens, secretary of the University. The estimated cost of the main building is \$369,000 and the estimated cost of each of the wings is \$75,000, making the estimated cost of the completed building \$519,000. Separate bids are being received on the main building and on the main building with the two wings added.

IN providing an addition to the Riley Hospital for Children at Indianapolis, Indiana Kiwanians have made possible the admission of fifty more children to the hospital and have increased the training facilities for students in the Indiana University Training School for Nurses. Beginning March 1st, with the second semester of the school year, additional student nurses can be accepted for admission, according to the announcement of Mrs. Ethel P. Clarke, R.N., director. Room for thirty student nurses will be available that date.

DR. E. T. THOMPSON, administrator of the Indiana University Hospitals, will make a survey of hospitals for children under the auspices of the Riley Memorial Association. This work is being done in connection with construction of another addition to the Riley Hospital beginning this year, to be financed on subscriptions by Rotary clubs of Indiana. Dr. Thompson will make the survey in company with architects to develop the most scientific and approved design for a convalescent hospital which will be named the Rotary unit. A campaign has been conducted among Rotary clubs of the state to raise funds for this addition and the Riley Memorial Association is assured that construction of this new wing will be started within the year.

INDIANA's first course by radio for full university credit will be offered beginning February 13th over Station WFBM, Indianapolis. Dr. Thurman B. Rice, associate professor of bacteriology and public health, will give the course in hygiene. It is a course required of all students of the university and is expected to lend itself to popular reception by the public at large as well as by those who take the course for credit. The course will be given at five o'clock each Thursday evening for a period of eighteen weeks and will carry with it one full semester's hour of credit. Those who take the course for credit will have a text for reading assignments. They will submit recitation papers showing that they have done the required reading and have taken notes on the radio lectures by Dr. Rice. A final check on the work done will come through the final examination to be given at the end of the course. Dr. Rice also is giving a four weeks' non-credit lecture series on the subject of bacteria over Radio Station WKBF, Indianapolis.

The establishment of a Bureau of Social Service at Indianapolis to be operated in connection with the economics and sociology department of Indiana University has been announced by President W. L. Bryan. The new social service bureau of the university will be located at 122 E. Michigan St., Indianapolis, and Prof. R. Clyde White will be in charge. Dr. Bryan explained that while the bureau will work in close cooperation with the Indianapolis Council of Social Agencies and the University Hospitals, it will have a working relation with the Indiana Board of State Charities and with other agencies which touch the entire life of the state. President Bryan said the board of trustees of the university had voted to establish the bureau in response to the need for this type of work and to the requests which have come to the university from various parts of the state to do special pieces of social research.

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

December 17, 1929.

Meeting called to order at 4:30 p. m.

Present: Wm. N. Wishard, M.D., chairman; C. P. Emerson, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held December 10th read and approved.

The release, "Holiday Health," read and approved for publication Monday, December 23rd.

Radio release, "A Mighty Christmas Gift," was approved for broadcast December 21st.

The following statement concerning the work of headquarters office and the Bureau of Publicity appeared in the December, 1929, number of *Colorado Medicine*. This statement about the work in Indiana was made in a report of the new executive secretary of the Colorado State Medical Society who visited Indiana before starting to work in Colorado:

"Indiana: Thomas A. Hendricks, executive secretary, is, like Mr. Crownhart, a former newspaperman. To me the outstanding features of the Indiana society are its systematic program of educating the public in matters of public health, and its highly efficient organization of the profession for the protection of scientific medicine and the public health in the legislature. Mr. Hendricks has two office assistants and maintains probably the best biographical and professional record of physicians of any of the states. Unlike most full-time secretaries, he has nothing to do with *THE JOURNAL*.

"Indiana's system of public education is divided into two parts: articles prepared for newspapers and magazines, and radio lectures. I will not go into the radio subject for I believe the plan not applicable to Colorado at the present time. The Indiana Society has a bureau of publicity, corresponding to our Committee on Public Policy, which meets weekly in Mr. Hendricks' office. Hendricks prepares, and the bureau revises and approves, a weekly release on public health subjects. The release is sent, in mimeographed form, to every newspaper in the state. It is impossible right now to go into detail, but suffice it to say that the program has worked wonders in increased friendship for scientific medicine and increased respect for the Society and for the profession. It has helped build the membership. These bulletins are issued over the name of the Bureau of Publicity of the Indiana State Medical Association, without signature by any one physician, are highly ethical, and approved by the A. M. A.

"Indiana organization for legislative purposes is indeed intricate. We do not need such an elaborate plan for the present, but permit me to describe it. Indiana has thirteen councilor districts. Each county has a legislative committee chosen by the county society. Each councilor names a district legislative chairman from these committees. The district chairmen are supervised by a state legislative committee consisting of the president, executive secretary, and three others named by the president. The state and district committees bring about county meetings before the primary campaigns each two years, so that each county society, through investigations made by its committee, chooses the legislative candidates of both parties known to be favorable to scientific medicine. This information then is compiled by Mr. Hendricks, who prepares bulletins and mails them to every member of the Society. With this plan, many of the candidates antagonistic to scientific medicine are eliminated in the primaries. Where they are not, the committees conduct meetings of the profession and interested laymen in strategic places before the general election and line up support for the proper candidates, regardless of party lines.

"By this sort of work—and I have only outlined it briefly—the profession's legislative work is mostly done before the legislature ever meets. They have found the answer to their legislative problems in just one word—organization."

Attention of the Bureau was directed to the fact that newspaper releases are being sent by Dr. William F. Koch, *self-admittedly* "nationally known biological chemist" and head of the Koch Cancer Foundation of Detroit, to newspapers in Indiana and undoubtedly throughout the country. Dr. Koch asserts, "It is an error to assume that the cancer growth itself is the cause of the disease, and the use of surgery, radium and x-rays for the removal or destruction of such growths results in very little benefit." Dr. Koch tells of the benefit of his "synthetic antitoxin" in cancer. He says, "Perhaps the most important scientific advance of the last decade in the fight against cancer is the demonstration that the toxin that causes the disease can be changed from a deadly poison to an absolutely harmless and even useful substance simply by altering its molecular structure in a definite way."

The secretary of the Bureau was instructed to prepare a warning concerning the unscientific basis of Dr. Koch's claim and send it to the newspapers. A basis for these warnings was to be the recent publication against Dr. Koch that appeared in the bulletin of the Indianapolis Better Business Bureau.

A letter was received from Richard Dalche, attorney at New Orleans, Louisiana, asking for information concerning a Dr. or Mr. Arnold, formerly professor of medicine at one of the universities in Indianapolis. The facts in the case are presented by the letter following:

"My reason for seeking this information is that a daughter of this Mr. Arnold recently died in the city of New Orleans without heirs locally and the only information that we could get is that her father was a professor of medicine in some institution in your city, and that his deceased daughter, Rose Lee Arnold, was a telegraph operator in your city about 1875, so I theorize that her father practiced medicine in your city between 1860 and 1875, or even later. As this is an estate matter we are trying to locate any of her heirs in your city and if there is any assistance you may be able to render along this line, it will be appreciated and made worth while."

The secretary was instructed to use every means possible, by inquiries to *THE JOURNAL* and the University School of Medicine, to get the information desired concerning Dr. or Mr. Arnold.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole December 24, 1929.

January 8, 1930.

Meeting called to order at 4:00 p. m.

Present: Wm. N. Wishard, M.D., chairman; Chas. P. Emerson, M.D., by proxy, and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held December 17th read, corrected and approved.

The release, "Health Resolutions," read and approved for publication Saturday, January 18th.

Radio releases:

December 28—"Cerebro Spinal Meningitis."

January 4—"Health Resolutions."

January 11—"Tribute to the United States Public Health Service."

Speaking engagements:

January 6—Rush County Medical Society, Rushville. "Urinary Antiseptics" and "Spinal Meningitis."

The comment which appeared in *The Indianapolis Medical Journal* of December, 1929, in regard to the Bureau of Publicity was brought to the attention of the Bureau.

and the members of the Bureau expressed their appreciation for this favorable mention.

Copies of the warning concerning the claims published in various Indiana papers by Dr. Koch in regard to his cancer cure were obtained from the Better Business Bureau of Indianapolis. The secretary was instructed to send this warning along with a letter to the newspaper editors throughout Indiana, secretaries of the county medical societies, and the councilors of the Indiana State Medical Association.

Clipping received from the *Ohio State Journal*, Columbus, Ohio, commenting editorially upon the recent bulletin issued by the Bureau of Publicity concerning fresh air sleeping.

The following letter was received from the president of the Marion County Tuberculosis Association:

"Our Board of Directors wishes me to express to you the very deep gratitude of each of its members for the splendid cooperation you and your association gave during the annual sale of Christmas Seals. The use of your radio time over WFBM was one element which helped to make the 1929 Christmas Seal Sale a success. We have had reports from many people showing that they listened in at the time these talks were given.

"We are happy to tell you that this year's sale, due to such cooperation as your association and many others have given, will perhaps exceed that of last year, which is very good when we consider that business was not at full speed this year. Besides our thanks to you we wish you a very healthy and prosperous 1930."

The committee reviewed the correspondence on the Calbro-Magno-Wave electronic apparatus that is being exploited by a chiropractor at Monticello, Indiana. According to the Monticello papers this apparatus, which apparently is similar to the discredited Abrams machine, was to be demonstrated by a "Dr." D. T. Sturgis, of Omaha, Nebraska. The State Board of Medical Registration and Examination will be asked by the headquarters office of the Indiana State Medical Association to investigate this entire matter. Special investigation will be asked concerning the unscientific claims published in the Monticello newspaper. The State Board of Medical Registration and Examination also will be asked to determine whether "Dr." Sturgis is licensed to practice in Indiana and whether his conduct of a "clinic" before the public as advertised is in violation of the state law. The following telegram was sent in regard to this case and the following letter was received:

"H. L. Miller, Chiropractor,
Monticello, Indiana:

"We are asking State Board of Medical Registration to investigate immediately your unscientific claims concerning electronic apparatus published in Monticello paper and to investigate whether Doctor Sturgis is licensed to practice in Indiana and whether his conduct of a clinic as advertised would be a violation of the state law."

Reply from editor follows:

"Dr. Miller has called my attention to a telegram received from you today calling attention to certain statements made in our paper in reference to Electric Magno-wave apparatus that he is installing.

"In this connection, I wish to state that the article in question was written by me after a brief interview with Dr. Miller and in some respects may be misleading. Dr. Miller did not represent the apparatus, in his interview, as a positive cure for cancer as might be inferred from the published statement. The word 'positive' was intended to refer to the 'diagnosis' and not the 'cure.'

"I am very sorry if my wording of this statement has led to a misunderstanding and hasten to advise you that the mistake was mine.

"Very truly yours,

"P. R. BAUSMAN,

"Editor Monticello Herald, Monticello, Indiana."

The secretary was instructed to write the editor of *The Monticello Herald*, acknowledging his letter and stating that the Bureau was glad to receive it. The letter from the Bureau was also to state that the Bureau would be interested in seeing a correction of the errors in the paper and would be pleased to receive a copy of the paper in which a correction of the errors is made.

Letter received from the president of the Cass County Medical Association in regard to information concerning certain after-dinner speakers that may be obtained outside of the profession to make talks other than those of a medical nature.

The secretary was instructed to include in the regular monthly bulletin to county medical society secretaries a notice that the Bureau of Publicity is able to supply speakers to county medical societies upon the recent epidemic of cerebro-spinal meningitis which occurred in Indianapolis.

The following bills were approved for payment:

| | |
|--|---------|
| Indianapolis Commercial Printing Co..... | \$ 5.25 |
| Central Press Clipping service..... | 5.00 |
| A. B. Dick Company..... | 6.50 |

Total\$16.75

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole January 14, 1930.

January 14, 1930.

Meeting called to order at 4:30 p. m.

Present: William N. Wishard, M.D., chairman; Chas. P. Emerson, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held January 8th read, corrected, and approved.

The release, "Germs," read and approved for publication Saturday, January 25th.

Radio release, Saturday, January 18th, "Germs."

The following letter which was to be sent to the editors of the various Indiana newspapers was presented to the Bureau for its approval:

"WARNING!

"KOCH CANCER FOUNDATION

"To Editors of Newspapers in Indiana:

"Gentlemen:—Our attention has been called to the newspaper releases sent from time to time to the press of Indiana by William F. Koch, head of the 'Koch Cancer Foundation of Detroit' and self-admittedly 'nationally known biological chemist.'

"In one of these releases, Dr. Koch makes certain statement concerning the value of 'synthetic antitoxin' in cancer. We feel that the public should be warned against Dr. Koch and his claims. So far as is known, no serum, whether Dr. Koch's or any other, has been evolved for the treatment of cancer which has given results that can warrant the endorsement of the medical profession.

"We refer you to the enclosed reprint from a bulletin issued by the Better Business Bureau of Indianapolis for further information concerning Dr. Koch."

Letter approved.

Letter received from Elkhart physician thanking the Bureau for prompt reply and material sent in regard to tuberculosis.

The Executive Committee presented to the Bureau of Publicity for its approval the following resolution in regard to food fads:

"WHEREAS: Much misinformation is promulgated today concerning the question of diets, thus causing the introduction of food fads, very few of which can take the place of the older staple foods; and whereas,

"Any balanced diet should contain animal protein, fruits, vegetables, especially the leafy vegetables, and the better grades of bread prepared from flour which will

insure adequate vitamin and mineral salt content, digestible fat such as butter-fat, and sufficient of the digestible carbohydrates to afford readily available energy; and whereas,

"The allegation that white bread, meat or any other staple food, when employed in mixed diet is responsible for certain grave illnesses, is not supported by scientific facts;

"THEREFORE, BE IT RESOLVED THAT: We desire in the public interest to place on record that in our opinion:

1. The exaggerated claims for various fad foods are unwarranted by scientific evidence or practical experience; and the advertising and other propaganda furthering their substitution for the older articles of diet should be condemned.
2. The danger of nutritional deficiencies has been grossly exaggerated. No one food is a perfect food; but a diet consisting of dairy products, leafy vegetables, fruits, meats and easily digested starches furnishes an excess of all food factors necessary for proper growth and nutrition and resistance to disease.
3. Any variation from a normal diet should be prescribed only by a properly trained physician after a careful study of the dietary requirements of the individual seeking advice.

"Adopted at Indianapolis, Indiana, this 14th day of January, 1930, by action of Executive Committee of the Indiana State Medical Association."

This resolution received the approval of the Bureau of Publicity.

The attention of the Bureau of Publicity was called to the fact that the January *Survey Graphic* devoted practically its entire number to the subject, "The Cost of Health."

Letter received from the president of the Dearborn-Ohio County Medical Society asking for suggestions as to stimulation of interest in the local society. Letter answered.

Editorial on postgraduate courses which is to appear in the January number of THE JOURNAL brought to the attention of the Bureau. The Bureau suggested that a letter be written to the secretary of the American Medical Association asking what postgraduate courses have been carried on in other state societies and in what states these courses have proved to be the most successful.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole January 21, 1930.

INDIANA STATE BOARD OF HEALTH DIVISION OF COMMUNICABLE DISEASES

MONTHLY REPORT FOR JANUARY, 1930

The prevalence of communicable diseases in the state during the month are summarized below. This summary is prepared from the reports of the health officers of the state. These reports are sent in on Saturday on franked report cards. When no diseases occur in their jurisdiction, they send in a negative card, stating this fact. Positive reports were received from eighty-three counties. Four counties sent in negative reports, while Noble, Pike, Pulaski, Switzerland and Wells counties made no reports.

The reporting of diseases is a vital procedure. It would be well if there were no diseases to report, but knowing of the wide prevalence of diseases, the fear is that some are overlooked or neglected.

Smallpox is the most prevalent disease reported during the month, 889 cases. An increase over the previous month, where 653 cases were reported. The corresponding month last year had 243 cases. The smallpox incident during the month is greater than the normal seasonal increase. The estimated expectancy was 440 cases. The estimate is made on the reports for the last seven years. Evidently, the incident of vaccination is being sadly neglected.

Chickenpox shows a slight decrease, 484 cases this month and 548 cases last month. There is a strange coincidence with this disease when smallpox is prevalent. It is difficult in differential diagnosis to name the disease.

Scarlet Fever increased over the previous month. Seven hundred seventy-two cases were reported and 653 last month. This is not far from the normal seasonal increase. The estimated expectancy was 652 cases. February and March are the peak months for this disease.

Typhoid Fever is at a stand still. An even number of cases were reported as compared with last month, eight cases. The same month of the previous year five cases were reported. It is very evident that typhoid fever is not a serious menace in the winter months. It is a late summer and early autumn disease in Indiana.

Diphtheria shows almost stationary. One hundred twenty-five cases this month and 123 cases last month. The same month the preceding year 162 cases were reported. This is below the season's averages. The normal average for the period is 324 cases.

Cerebro-Spinal Meningitis shows a marked increase. Eighty-eight cases this month and 56 cases the previous month. The counties reporting the greatest number of cases were Marion, 39 cases; St. Joseph, 14 cases; Lake, 5 cases; Floyd, Franklin and Tippecanoe, three cases respectively. All other cases were reported as sporadic.

The name and number of diseases reported during the month not mentioned above are as follows: Tuberculosis, 137; measles, 321; whooping cough, 169; influenza, 128; pneumonia, 46; mumps, 8; poliomyelitis, 1 case in Carroll county; ophthalmia neonatorum, 1 case; undulant fever, 1 case in Wabash county and 2 cases of tularemia, one each in Tippecanoe and Union counties.

The director investigated an outbreak of cerebro-spinal meningitis in one family in Brookville and assisted the school authorities and Dr. C. H. White, Mooresville, in a diphtheria situation in Washington township consolidated schools, Morgan county. Swabs from the throats and noses were taken of the entire school. Six carriers of diphtheria were found.

H. W. McKANE, M.D.
Collaborating Epidemiologist,
U. S. P. H. Service,
Indiana State Board of Health.

INDIANA STATE BOARD OF MEDICAL REGISTRATION AND EXAMINATION

At the annual meeting of the Board of Medical Registration and Examination, January 14th, the present officers were re-elected to serve for the coming year, as follows:

W. A. Spurgeon, M.D., Muncie, President.
J. B. Kinsinger, D.O., Rushville, Vice-president.
Wm. R. Davidson, M.D., Evansville, Secretary.
J. W. Bowers, M.D., Fort Wayne, Treasurer.

For some time the Board had been trying to get proper evidence upon which to file an affidavit against Dr. J. S. D. Crane, who had been practicing in Indianapolis without a license. Before we could get action, however, he left Indianapolis in great haste without leaving a forwarding address. We have reason to believe that he is the same Dr. J. Douglas Crane who has had serious difficulty with the Ohio state authorities. The Board will appreciate any information concerning Dr. Crane's practice in Indiana, if he should return to the state.

The hearing of the charges which had been filed with the Board asking for the revocation of the license of Dr. Grant S. Beatty, of French Lick, was postponed until March 14th.

The Board adopted some resolutions making changes in the rules for conducting the examination for license to practice medicine, and appointed a committee to give especial attention to the examination in the basic science subjects. The scope of these examinations will be widened and the Board will be prepared to issue a certificate to

all who pass a satisfactory examination in these subjects. This action is taken as an aid to Indiana men who may seek reciprocity with other states having the basic science law.

The next meeting of the Board will be March 14th.

INDIANAPOLIS MEDICAL SOCIETY

January 25, 1930.

The annual dinner and meeting of the Indianapolis Medical Society was held at the Athenæum, Tuesday, January 7, 1930, at 6:00 p. m. The ladies were invited. Attendance, 300. The dinner music was furnished by an eight-piece orchestra.

The business meeting was called to order by the outgoing president, Dr. Murray N. Hadley. Installation of officers was conducted by Dr. Hadley, after which the new president, Dr. John A. McDonald, took charge of the meeting and presented certificates of service to Dr. L. D. Carter, president in 1928, and Dr. Murray N. Hadley, president in 1929.

Dr. Bernard J. Larkin gave the report and recommendations of the Judicial Council. The outstanding recommendation was that the Society, during the year, place into effect a plan to finance the purchase of property for a meeting place.

The secretary-treasurer's report was given by Dr. Chester A. Stayton. The report showed a 100 percent collection of dues for the year ending 1929. This fact alone speaks well for the interest of the members of the Society and their whole-hearted cooperation in the support of organized medicine. Congratulations are extended to each of the 472 members.

The applications of Drs. N. Cort Davidson, Byron K. Rust and Gilbert A. Ratcliff were presented to the Society.

Dr. Murray N. Hadley gave a prepared address the subject of which was "Medical Education in Indiana." It was moved and seconded that Dr. Hadley's paper be published in the *INDIANA STATE MEDICAL JOURNAL* and that a copy be placed in the files of the Indianapolis Medical Society.

The remainder of the evening was given over to a variety show.

The following past-presidents attended: Drs. H. O. Pantzer, 1895; C. E. Ferguson, 1913; David Ross, 1915; A. B. Graham, 1916; T. B. Noble, 1917; J. H. Taylor, 1920; A. L. Wilson, 1921; J. W. Sluss, 1922; A. S. Jaeger, 1926; H. G. Hamer, 1927; and L. D. Carter, 1928.

The regular meeting of the Indianapolis Medical Society was held at the Athenæum, Tuesday, January 14, 1930, at 8:15 p. m. Attendance, 85. Dr. John A. MacDonald presided.

The application of Dr. Charles A. Morgan was presented.

The scientific program was as follows: Case reports:

1. Granuloma Inguinale—Dr. John Brayton.
2. Sphenoiditis Causing Blindness—Dr. Sidney Aronson.
3. Toxic Goiter—Dr. R. F. Banister.
4. Complications of Pernicious Anemia—Dr. Henry Alburger.
5. Polycythemia Vera—Dr. E. M. Amos.
6. Hemiatrophy of the Brain (motion pictures)—Dr. Max Bahr.

Sandwiches and coffee were served after the meeting.

The regular meeting of the Indianapolis Medical Society was held at the Athenæum, Tuesday, January 21, 1930, at 8:15 p. m. Attendance, 95.

Dr. John A. MacDonald presided.

The minutes of the previous meeting were read and approved. Dr. C. L. Richardson was accepted as a member of the society. The scientific program was as follows:

1. Experimental Study of Peritonitis—Dr. H. M. Trusler.

2. Diabetic Coma—Dr. John H. Warvel.

Discussion: Drs. M. N. Hadley, W. D. Gatch, and C. L. Rudesill.

Sandwiches and coffee were served after the meeting.

CHESTER A. STAYTON, M.D.,
Secretary.

WOMAN'S AUXILIARY TO THE INDIANAPOLIS MEDICAL SOCIETY

The Woman's Auxiliary to the Indianapolis Medical Society were guests of the Methodist Hospital Nurses Friday, January 3rd, in the Jacob Wiles Memorial Home.

A short business session was held and the following officers were elected:

President—Mrs. Ross C. Ottinger.

First Vice-president—Mrs. William A. Doeppers.

Second Vice-president—Mrs. L. D. Carter.

Third Vice-president—Mrs. William A. McBride.

Fourth Vice-president—Mrs. Lyman Pearson.

Recording Secretary—Mrs. Charles R. Sowder.

Corresponding Secretary—Mrs. Chester A. Stayton.

Treasurer—Mrs. William E. Gabe.

Publicity Agent—Mrs. C. N. Harold.

A delightful social hour followed a musical program arranged by Mrs. Charles Pfafflin, chairman of the program committee. Selections were given by Violinist Charles Emerson, Jr., accompanied by Mrs. Kolmer, and Vocalist Miss Wila Kettenbrach, accompanied by Mrs. Charles Pfafflin.

Respectfully submitted,

MRS. CHARLES R. SOWDER.

Recording Secretary.

ST. JOSEPH COUNTY MEDICAL SOCIETY

The St. Joseph County Medical Society held its last meeting for the year December 17, 1929, at the Public Library, with Dr. Huffman in the chair.

A letter from the Midwest Company was read. This letter referred to making a list of doctors, with a short sketch of each, a sort of "Who's Who" in the American medical world. After discussion the following motion was carried:

"As physicians are ably represented graphically in the A. M. A. Directory, it is not our desire to be represented otherwise."

An interesting case of a fractured hip in a child of three years was reported by Drs. Douglas Owen and Fisher, who saw the case six weeks after the fractured hip was put up in a simple spica cast by an out-of-town doctor, and the patient was advised to see a doctor only to have the cast removed. No x-ray had been taken. An x-ray showed much deformity and bad union. Case was discussed by Drs. Stoltz and M. W. Lyon, Jr.

The paper of the evening was by Dr. Douglas Owen on "Local Anesthesia."

"Anesthesia, in its earliest history was purely local, and in many of its most valuable forms remains of a local nature today. The earlier use of cocaine and its derivatives has been replaced largely by novocaine the world over. Novocaine injection anesthesia includes four main types: infiltration, field block, plexus or nerve block, and root block with its subdivision of spinal anesthesia. In the same order, their value in surgical procedure increases. Spinal anesthesia, in particular, is a valuable aid in producing all absence of pain, relaxation of muscles, and collapsed bowel loops for major surgery below the diaphragm. The more recent introductions including rectal ether and oil, and rectal Avertin, have their distinct place in general anesthesia. Sodium amytal seems to be the answer for an ideal synergistic anesthetic and its increasing clinical use will allow us to evaluate it even better in the near future. All of the special methods, however, in the field of anesthesia should be used by

those skilled in anesthetic methods, and cases should be selected more carefully than before. The physician anesthesiologist is a necessity if we are to obtain the greatest benefit from anesthesia. The anesthesiologist should be a true partner in any operative procedure and not a subordinate receiving the present insufficient remuneration."

Paper was discussed by Drs. Skillern, Stoltz, Sandock, M. W. Lyon, and Giordano.

The meeting was followed by the usual social hour with sandwiches and coffee.

The first meeting of the St. Joseph County Medical Society for the year 1930 was held January 14th at the Public Library with the President, Dr. Geisler, in the chair.

The following committees were appointed:

Program—Dr. Bickel (chairman), Dr. Douglas Owen, Dr. Ellison.

Necrology—Dr. Mitchell (chairman), Dr. Stoltz, Dr. Traver.

Library—Dr. Hyde (chairman), Dr. Birmingham, Dr. Sensenich.

Public Health and Legislative—Dr. Bosenbury (chairman), Dr. Wegner, Dr. Cassady.

Annual Meeting—Dr. M. W. Lyon, Jr. (chairman), Dr. Milo Miller, Dr. Duggan.

Family Night—Dr. Savery (chairman), Dr. Haley, Dr. Blackburn.

Dr. Thos. B. Pauszek's application for membership was referred to the board of censors.

A joint paper on Cerebro-Spinal Meningitis, by Drs. J. E. McMeel and A. S. Giordano, brought out a record attendance of more than a hundred, including visitors from neighboring cities and towns.

Dr. James E. McMeel spoke as follows:

"Cerebro-Spinal Meningitis (Epidemic). First epidemic reported by Viessieu in 1805 near Geneva. Second epidemic reported by Danielson and Mann in 1806 at Medford, Massachusetts. In 1830 first confirmation post-mortem examination.

"The epidemics, 1805-1830; 1837-1850; 1854-1874; 1876-1882; in Boston 1897, France 1898, New York 1904, France 1910, Texas 1912, England and Wales 1914. In 1915, 1916 and 1917 there were 5,000 cases with sixty-five percent mortality.

"The disease is really endemic with epidemic aspects developing only after a large percentage of carriers develop and following conditions of poor hygiene, overcrowding, or low resistance; also acute respiratory infections predispose.

"Dopter grouped the organisms into two classes, A and B.

"Gordon grouped them into four types, 1, 2, 3 and 4.

"Etiology—Over-crowding, coryza, and influenza, males generally. First two decades of life.

"Spread infection—Probably by carriers and direct contact. In 3,617 cases 3,402 were sporadic; there were one hundred instances of multiple cases.

"Dickenson reported an epidemic in March, 1929, in Durango, Mexico, thirty cases, no two in the same family and no isolation was used although living conditions were poor and there were as many as fourteen members in some families.

"The clinical forms are generally classified as follows: (1) the fulminating, (2) the ordinary acute, (3) the abortive: (a) the septicemic, (b) meningitic; (4) the chronic: (a) a case not treated, (b) septicemic, (c) ensted.

"While not going into the various forms the type we wish to call attention to is the ordinary acute case, with an onset of fever, intense headache, vomiting and very frequently pain in the posterior cervical region, with or without rigidity. Such a picture particularly in the presence of other cases in the vicinity calls for an early diagnosis, and the quickest and most positive method that I

know of is the examination of the spinal fluid. This can be done almost under any condition and is a very simple procedure and practically danger free.

"An increased spinal fluid pressure with a cloudy fluid should be interpreted as meaning that the patient should have a preliminary spinal injection of anti-meningococcic serum.

"Follow-up examination of the spinal fluid will reveal whether further treatment is necessary.

"Treatment: The treatment of this condition varies according to the type of case and according to the person handling the case. Some prefer plain serum, others the concentrated. Some men use a large dose (30 cc.) of plain intraspinal and 30 cc. intravenously, given every twenty-four hours until the temperature becomes normal, the rigidity of the muscles lessens and the examination of spinal fluid shows a reversion back to the normal cell count.

"One point which has been brought out in recent years is the fact that a serum must be used which agglutinates the particular type or strain of meningococci present in the case.

"Summing up my few remarks, I think I can give you the gist of it all by saying in suspected cases early and frequent spinal puncture at the home, early and intensively intraspinal and intravenous treatment, which includes serum testing, isolation of the patient, examination of contact cases and a plea to the public not to become unnecessarily hysterical."

Dr. Giordano spoke on the bacteriology, morbid anatomy and cisterna puncture, a procedure necessary in cases of spinal block.

The papers were discussed by Dr. Knode, who had four cases in one family, which is rather unusual. He also spoke of the kind of serum used and the number of injections necessary in his cases, all of which seem to be on the way to recovery. Other discussants were Drs. M. W. Lyon, Jr., Abel, Savery, and Bosenbury. Drs. McMeel and Giordano closed the discussion by answering many questions.

The meeting adjourned at 9:45 p. m.

MARTHA BREWER LYON,
Assistant Secretary and Treasurer.

TIPPECANOE COUNTY MEDICAL SOCIETY

January 9, 1930.

The Tippecanoe County Medical Society met in regular session at the Lahr Hotel.

The minutes of the previous meeting were read and approved.

The communications were read.

Dr. Crockett spoke of having a tuberculosis program at one of our spring meetings—probably the June meeting. He has arranged for a speaker on that program. The secretary was directed to address a communication to the secretary of one of the staffs of the hospital, probably Dr. C. V. Davisson, secretary of the staff at St. Elizabeth's Hospital, asking the staff to take charge of one, probably the March, meeting of the year.

Dr. Hupe spoke of the poor attendance of medical men at funerals of fellow physicians. He urged that there be a better attendance, which was taken with considerable meaning.

The applications of Drs. Weinberg, Dahling and Linton, internes at St. Elizabeth's Hospital, were read the second time. Motion was made and carried that we suspend the rules and elect the candidates by acclamation.

Letters from President Reed of the Cass County Society was read urging our members to attend an annual get-together meeting of their society to be held January 16th. The question was left with the secretary to have attendance if possible.

Members of the Dental Society were guests of the Medical Society.

At this point the speaker, Mr. J. D. O'Meara, of Fort Wayne, Indiana, was introduced by President McCay.

His subject was "The Relation of the Physician and Dentist and the Patient." Mr. O'Meara presented his subject in a very clear and concise way, making it well understood. He was interrupted quite frequently by questions from various members of the two professions. The address and discussion lasted until past ten o'clock. Everyone present felt that the time was very well spent during the evening and that those who were absent had missed a very fine discussion on a very important subject. A rising vote of thanks was extended Mr. O'Meara for his splendid address.

Motion to adjourn was carried.

J. C. BURKLE, M.D.,
Secretary.

The Tippecanoe County Medical Society adopted the following resolutions pertaining to the death of Dr. Schaible:

WHEREAS: In the death of Dr. Emil Schaible the community has lost a valuable citizen, and the medical profession a conscientious practitioner of the old school.

BE IT THEREFORE RESOLVED: That the members of the Tippecanoe County Medical Society hereby express their sympathy to the bereaved wife and family of the late Dr. Schaible;

That a copy of these resolutions be sent to Mrs. Schaible and family;

That a copy be spread upon the records of this Society;

That a copy be sent to THE JOURNAL for publication.

DR. C. C. DRISCOLL,

DR. WM. M. RESER,

Committee.

MADISON AND GRANT COUNTY MEDICAL SOCIETIES

Sixty-six physicians from Madison, Grant and Tipton counties attended the largest meeting ever held under the auspices of the Madison County Medical Society January 21st. The meeting was held at the Y. M. C. A. Following a dinner, addresses were given by Dr. Nettie Powell, of Marion, past president of the Grant County Medical Society, and by Dr. LaRue Carter, of Indianapolis.

Dr. Carter spoke on "Meningitis and the Epidemic at Indianapolis." His address was based on a wide experience with the disease and had increased interest because of general alarm felt over the presence of cerebro-spinal meningitis in Indiana.

His address revealed that, aside from certain districts in Indianapolis, there is no evidence now of an epidemic in any other part of the state. He told of a general meningitis fear which is extant in the state. Dr. Carter has been called to four cities recently to see supposed cases of meningitis, but only one of these cases proved to be correctly diagnosed. The general fear of meningitis in the state now is without foundation, his address indicated.

Dr. Carter's experience with the disease dates back for several years when as chief surgeon in the Thirty-seventh division at Camp Beauregard there were 600 cases of meningitis in the division of 30,000 men. That was in the winter of 1917. The mortality rate in that epidemic was eighty-five percent, Dr. Carter said.

The recent epidemic at Indianapolis began about December 1, when two colored children, both in the same family, were stricken. They died within twelve hours after they were taken ill. Since then there have been seventy-four cases, occurring mostly among the colored people, and in all instances among the poorer classes where living conditions are insanitary and unhygienic.

The speaker declared that there is no evidence of a general epidemic at Indianapolis. Yet, he said, there probably is as much danger of getting the disease while in a crowded street car or a crowded theater as there is in going into the hospital where meningitis patients have been taken. Carriers, who themselves appear to be well,

may have the germs in their nasal passages and give the disease to others.

Dr. Carter emphasized the necessity for healthy, hygienic surroundings and fresh air as the best-known preventative for meningitis. He, nor anyone else in the Riley Hospital, use any sort of nasal spray or antiseptic to guard against infection, Dr. Carter said. They wear masks while caring for the sick, but do not use antiseptic sprays for fear that some slight irritation to the throat might make them more susceptible to infection.

The epidemic at Indianapolis was similar to one prevalent at Los Angeles, Dr. Carter said. There were 302 deaths at Los Angeles, mostly among Asiatics. It would appear, he said, that the Asiatics, there were more susceptible, even as the colored people at Indianapolis. Dr. Carter went into detail about treatment of meningitis, but said that in a great majority of cases the poison from the infection is so severe that medical measures do not give relief.

Dr. Carter said there are four different types of germs that cause meningitis and that the epidemic at Indianapolis is caused by type three. The disease, he said, is identical with epidemics years ago, then known as spotted fever.

Dr. F. E. Hall, of Alexandria, gave a review of an epidemic of "spotted fever" which occurred near Alexandria forty years ago when three members of his family died of the disease. Dr. A. H. Sears, of Anderson, told of an epidemic which occurred in Anderson in 1893. This was of great severity and large numbers of persons died. Several Marion physicians told of their experiences with meningitis while in the army and told of an epidemic of "spotted fever" which occurred several years ago in Grant county.

No cases of meningitis now are being reported over the state, but as a matter of fact, cases of meningitis occur every year in isolated instances, Dr. Carter said. No one knows why at certain times these isolated cases do not produce enough virulence to become epidemic. The epidemic is lessening now at Indianapolis, he said.

Dr. Nettie Powell, of Marion, gave an excellent paper reviewing the work in pre-natal care of expectant mothers in an attempt to reduce the mortality rate, which now in the United States is five percent. In some states where this work is being done the death rate at childbirth has been reduced to two percent, Dr. Powell said. She also emphasized the necessity of follow-up work after birth, both for the child and the mother. Dr. Powell told of several of the commoner defects which are developed in children under four years of age and how these may be avoided. Her paper was a thorough review of the subject and it was highly complimented. Many physicians joined in the discussion which followed.

There were eighteen physicians present from Marion. Visitors also were present from Indianapolis, Union City, Tipton, Elwood, Alexandria, Pendleton, Markleville, Lapel and Summitville. The meeting was in charge of Drs. Erwin and Mobley, of Summitville. Dr. Merle Hoppenwrath, of Elwood, new president, presided.

Respectfully submitted.

M. A. AUSTIN, M.D.,
Secretary Madison County Medical Society.

WOMAN'S AUXILIARY TO THE AMERICAN MEDICAL ASSOCIATION

At the request of Mrs. James Blake, the following program of work for the Woman's Auxiliary of the American Medical Association is published. Other information of like character probably will appear in this column from time to time.

OFFICIAL HEALTH PROGRAM
of the
WOMAN'S AUXILIARY
of the
AMERICAN MEDICAL ASSOCIATION

I. Public Hygiene

Fundamentals upon which Auxiliary work for improvement of public hygiene should be based:

- (1) *Recognition of the fact that public health work is a highly technical job, requiring scientific, technically trained workers. That health work undertaken by lay women with no knowledge of the public health problem as a whole is necessarily fragmentary and ineffective.*
- (2) *Recognition of the fact that every state, county and city is entitled to a scientific full-time health department (organized not to treat the sick, but to prevent disease and promote health), adequately financed, free from political domination, and providing continuity of service to a trained personnel so long as work is efficient.*
- (3) *Recognition of the fact that the first and most fundamental job for lay organizations like the Auxiliary is to secure such scientific full-time health departments and adequate health protection, in their state, their county, their city or town.*
- (4) *Recognition of the fact that where efficient, full-time, scientific health departments do not exist (and only about ten percent of the rural districts of the United States have anything approaching adequate health protection), health activities must be initiated and carried on by volunteer unofficial agencies; but that all such work should be so planned and administered as to serve as stepping-stones toward the full-time official health department and that when the full-time official health department with workers trained for public health work, has become an accomplished fact, lay organizations should support and cooperate with the official workers and should be willing to take orders from them.*
- (5) *Recognition of the fact that no health department, state, county or city, can do effective work without intelligent cooperation of the public; that such public cooperation depends upon wide-spread health education; that lay organizations can do this educational work, and are needed for it; and that the Auxiliary can be one of the most valuable tools for an official health department to use in this work, because it can by its education of the public concerning the official health department's work and needs, be the means of gradually eliminating or preventing political interference with an efficiently working department, and thus insure to it uninterrupted public service.*

Most volunteer agencies do not yet realize the wastefulness of their individualistic efforts. One of the first things the Auxiliary should do is to work for a change of attitude in other volunteer women's organizations.

Health officials know that it is not always the work which makes the greatest emotional appeal to the public which most needs to be done. Unfortunately most women do *not* know this. This is something the doctors' wives might well undertake to teach other women.

The National Auxiliary recommends, therefore, that each State Auxiliary undertake, under the direction and with the help of the Public Health Committee of the State Medical Association and of its Advisory Council a study *first of all* of the fundamental principles of health promotion and disease prevention; second, of the set-up considered essential by public health experts for an effective state health department, of qualifications of personnel, adequate budget, and the like; and third, of the state health conditions; that it devise means of acquainting all the state board members with the result, and that recommendations for educational work by the County Auxiliaries be based upon the conditions found.

In states where all is well and where time has developed good official health machinery and good health conditions, general knowledge of the fact will tend to pre-

vent interruption of the excellent work, and will be a source of satisfaction to the women of the state.

In those states where there is much yet to be done, this investigation will indicate what sort of work needs doing first. For example:

- (a) In those states which are not in the Birth Registration Area, the Auxiliaries would, without doubt, wish to tackle, as their first job, the ninety percent birth registration problem.
- (b) In those states in which the state health department believes the "County Health Unit" to be the solution of the rural health problem, the county auxiliaries should be encouraged to take as their chief work such persistent and wide-spread education of the public as will create gradually a general demand for the full-time county health department.
- (c) In those states where the rural health work is done directly "long distance" by the state health department, the county auxiliaries, if willing to work, and work under the directions of the state health department, can carry on intensive local health education work which would be impossible for the state department without intelligent local cooperation.

To those auxiliaries which agree with these ideas the committee recommends the following outline of study:

- (1) Vital Statistics. Their value.
Compare the vital statistics of the state with those of other states. Compare the vital statistics of the different counties of the state.
Compare the vital statistics of the cities with other cities in the state, and in the United States.
- (2) The State Health Department; its organization; and program:
(a) For general state work.
(b) For cooperating with the counties in improving county health conditions.
- (3) The value of the Public Health Nurse.
- (4) The County Health Unit as a possible solution of the rural health problem.

COMMUNITY-WIDE CONDITIONS WHICH AFFECT HEALTH

- (5) Milk:
Milk standards, why necessary, what milk standards your community needs. How are these needs being met?
- (6) Housing:
Your community housing laws.
Housing conditions as they have developed under these laws and as they affect health.
Improvements needed.
- (7) General Sanitation and its relation to the death and morbidity rates.
Sewage disposal.
Water.
Garbage.
Flies.
Dust and street cleaning, etc.

II. Personal Hygiene

The improvement of personal hygiene in any community is almost entirely a matter of education. Here again the Auxiliary members must first educate themselves before they can take a safe part in educating the public. The committee therefore recommends that the Auxiliary study programs shall include such subjects as:

Health Promotion:

- Prenatal care.
- Child Welfare—infant and pre-school hygiene.
- School hygiene.
- Mental hygiene.
- Social hygiene.

The advantage to the public of general compliance with health regulations.

The periodic health examination.

Control of communicable diseases.

The entire program should close with a survey of all the private agencies doing health work in the community, and a discussion of the possibility and desirability of centering the direction of all such work in a full-time, scientific health department, under which the private agencies, while still maintaining their identity, would work in complete cooperation.

CORRESPONDENCE

THE "COLD"

Monroeville, Indiana, January 15, 1930.

Editor THE JOURNAL:

The following letter recently was received from one of my patients:

"To you I write to tell about my cold.

I've got the grip, may take a trip where streets are paved with gold.

I don't see why this poor old guy is made to suffer so; My limbs they ache, my back will break; my head will bust, I know.

I cough and sneeze, I grunt and wheeze, my temperature goes higher;

I'm cold, then hot, my nerves are shot; my eyes they burn like fire.

These symptoms few I'm telling you, and I feel worse than—well—

Perhaps I'll say some other day the rest I'd like to tell.

"Since getting this out of my system I feel very much better and think I will be back on the job some time soon."

C. H. WHITE, M.D.

BOOK REVIEWS

Books received will be acknowledged in this column. Selections will be made for more extensive review in the interest of readers and as space permits. Further information concerning these books will be supplied on request.

Books received since January 1, 1930:

CLINICAL OBSTETRICS. By Paul T. Harper, Ph.B., M.D., Sc.D., F.A.C.S., Clinical Professor of Obstetrics, Albany Medical College 629 pages, with 84 plates of engravings. Cloth. Price \$8.00. F. A. Davis Company, Philadelphia, 1930.

RESEARCH AND MEDICAL PROGRESS AND OTHER ADDRESSES. By J. Shelton Horsley, M.D., attending surgeon, St. Elizabeth's Hospital, Richmond, Va. 207 pages. Cloth. Price \$2.00.

THE SURGICAL CLINICS OF NORTH AMERICA (Lahey Clinic Number). Issued serially, one number every other month. Volume 9, number 6. December, 1929. 188 pages with 51 illustrations, and complete index to Volume 9. Per clinic year, paper, \$12.00; cloth, \$16.00. W. B. Saunders Company, Philadelphia and London, 1929.

HANDBOOK OF BACTERIOLOGY FOR NURSES. By Harry W. Carey, A.B., M.D., assistant Bacteriologist, Bender Hygienic Laboratory, Albany, New York, etc. Third revised and enlarged edition. 282 pages with forty-three engravings and one colored plate. Cloth. Price \$2.25. F. A. Davis Company, Philadelphia, 1930.

HEMORRHOIDS. THE INJECTION TREATMENT AND PRURITUS ANI. By Lawrence Goldbacher, M.D., 205 pages, with 31 half-tone and line engravings, some in colors. Cloth. Price \$3.50. F. A. Davis & Company, Publishers, Philadelphia, 1930.

BOOK REVIEWS:

HEMORRHOIDS—THE INJECTION TREATMENT AND PRURITUS ANI. By Lawrence Goldbacher, M.D., Philadelphia. F. A. Davis Company, Philadelphia, Publishers. Price \$3.50.

In this book Dr. Goldbacher describes his method of

treating internal piles and pruritus ani with injections of a five percent solution of phenolized oil (phenol crystals dissolved in Wesson or cottonseed oil). He believes in the efficacy of injecting large rather than small doses of the phenolized oil when possible. His usual dose for the first treatment of large internal piles is eight to ten cc. He reports having injected as much as twenty cc. at one treatment (divided into two injections of ten cc. each at different sites). More than ten cc. is never injected into one site. He has observed no untoward symptoms from the injection of these large quantities of the five percent phenolized oil and he reports uniformly excellent results.

The Goldbacher anoscope speculum employed for this therapy is the Dr. Collier Martin's proctoscope to which has been added the slide (Brinkerhoff) speculum. The type of needle that should be employed for the injections is stressed by the author, and he has therefore devised one which he states fulfills all the requirements for the injection therapy. Unfortunately, this author is unable to ascribe any value to any other method employed in injecting internal piles.

The injection treatment of internal piles had its origin almost sixty years ago. It was brought into disrepute because of the employment of too strong solutions of carbolic acid by incompetent physicians. That there is a recognized place for the judicious employment of this therapy is not to be denied. It should, however, be employed in carefully selected cases and this therapy should only be practiced by competent proctologists. Although having had a rather extensive proctologic experience, I should hesitate to inject into an internal pile the large quantities of the five percent phenol oil as recommended by Dr. Goldbacher. The injection of seven and one-half to fifteen grains of phenol into an internal pile cannot be regarded as a safe surgical procedure, and anyone with a limited experience in proctology is not warranted in employing such dosage. The author's anoscope speculum and needle are not essential for the correct injection of internal piles. There are several proctoscopes which will enable one to practice the injection therapy correctly.

The treatment of pruritus ani by injecting the five percent phenolized oil is not new. Until the true etiology of this most annoying condition is ascertained we will continue to use any medicament that will give the much-desired relief. The phenolized oil therapy possesses no advantages over other methods that are being employed by well-known proctologists.

A. B. G.

PROCTOLOGY. A Treatise on the Malformations, Injuries, and Diseases of the Rectum, Anus, and Pelvic Colon. By Frank C. Yeomans, A.B., M.D., F.A.C.S. Professor of Proctology, New York Polyclinic Medical School; Fellow and Past President, American Proctologic Society; Attending Surgeon, New York Polyclinic Hospital, and New York City Cancer Institute; Proctologist, The New York Hospital. 417 illustrations and four colored plates. Cloth. D. Appleton & Company, New York and London, 1929.

This is a most excellent and well-prepared book. Dr. Yeomans, drawing from an extensive experience of twenty-six years in clinical and private practice in proctology, has written a most complete and thorough book on this subject. His aim has been to supply the need so frequently expressed by students and practitioners—namely, a single volume which would cover adequately the subject of proctology without being encyclopedic on the one hand or a mere compendium on the other. This volume will supply the knowledge so much desired by the student and practitioner, and it will prove of interest and value to the proctologist who has had an extensive experience. It will accomplish its mission of alleviating suffering through the dissemination of knowledge.

Theoretical discussion has been sacrificed largely to the main purpose of producing a practical work. To this

end, beautiful illustrations, many of them original, some in colors, are used freely. Since it is impossible to discuss certain affections of the terminal bowel or rectum apart from the proximal colon, the author has devoted considerable space to the consideration of chronic proctocolitis, chronic mucous colitis, chronic ulcerative colitis, bacillary dysentery, and amebic dysentery.

The comparative merits of recognized therapeutic methods are shown, and the value and technique of the injection method in treating internal piles is covered fully. Pruritus ani is discussed very thoroughly and the author describes his experience in the treatment of this annoying affection with injections of benacol. He says: "All in all, no other drug or method of treatment which we have used has yielded results at all comparable with those obtained with benacol."

The technique of local and regional anesthesia is given in detail, and the anesthetic of choice in rectocolonic operations is discussed. Diverticulitis has received the consideration that its importance deserves, and non-malignant tumors are considered especially in their relation to malignancy. A major section of this volume is devoted to malignant tumors and the results of operative treatment of carcinoma of the rectum by various surgeons are charted. The newer methods of treatment by Roentgen rays, chemotherapy, and electrotherapy have received merited attention. This single volume, comprising 661 pages, on proctology should be in the libraries of all proctologists. It will likewise supply the knowledge desired by the student and practitioner. Dr. Yeomans has prepared a book on proctology that covers the subject most thoroughly.

A. B. G.

STRABISMUS. Its Etiology and Treatment. By Oscar Wilkinson, A.M., M.D., D.Sc., Surgeon in Chief of Washington Eye and Ear Hospital, Washington, D. C. Illustrated, 240 pages. Cloth. Price \$10. The C. V. Mosby Company, St. Louis, 1927.

This is a very timely, well-written book dealing with strabismus in all its phases. There is no subject more neglected than the proper treatment of strabismus, and unfortunately there are altogether too many ophthalmologists who for one cause or another are very lame in their consideration of such an unfortunate condition as strabismus, and particularly when appropriate attention in a majority of instances will bring about satisfactory results. One of the things that the book impresses upon the reader is the fact that early and definite treatment of strabismus and not watchful waiting is required in order to bring relief, and the author well says that the strabismic child usually is neglected until he arrives at such an age that his condition is incurable. The author presents the chief operative procedures recommended, together with discussions, and endeavors to give without bias the merits, difficulties and defects. A splendid chapter on non-operative treatment alone is worth the price of the book. We wish that every general physician as well as every specialist would read and follow the recommendations given in that chapter. The book is well illustrated and concludes with a number of illustrative case records which add to the value of the work. We heartily recommend the volume.

AN INTRODUCTION TO EXPERIMENTAL PHARMACOLOGY.

By Torald Sollman, M.D., Professor of Pharmacology and Materia Medica at Western Reserve University, Cleveland, and Paul J. Hanzlik, M.D., Professor of Pharmacology at Stanford University, San Francisco, California. Octavo volume of 321 pages, illustrated. Philadelphia and London. W. B. Saunders Company, 1928. Cloth. Price \$4.25.

The author presents this volume as an adaptation of Sollmann's "Laboratory Guide in Pharmacology" to a more definite course of exercises, involving a simplification of arrangement, a reduction in the number of experiments, and an expansion of the explanatory discussions, espe-

cially in the exercises on animals. The book consists of two parts, the first devoted to chemical pharmacology, and the second to experimental pharmacodynamics. In the former are discussed drugs and chemicals and their physiologic actions, whereas in the latter the reactions of living matter to chemical or physio-chemical changes of its environment are discussed.

THE NOSE, THROAT AND EAR AND THEIR DISEASES.

Edited by Chevalier Jackson, M.D., Professor of Bronchoscopy and Esophagoscopy in the University of Pennsylvania, in the Jefferson Medical College, etc., and George M. Coates, M.D., Professor of Otology, Graduate School, University of Pennsylvania. Octavo volume of 1177 pages with 657 illustrations and 27 inserts in colors. Cloth. Price \$13. W. B. Saunders Company, Philadelphia and London, 1929.

This book is the collaboration of the views of seventy-four well-known otolaryngologists and bronchoscopists each one of whom has contributed one or more chapters, and each of which were selected in the belief that he was an authority on the particular subject discussed. Like most books that represent a collaboration of ideas, there is an overlapping, and a tendency to individualism without reference to the opinions of others which to some readers is objectionable. However, we are free to admit that on the whole the volume represents a very trustworthy discussion of the various subjects pertaining to the nose, throat and ears, and their diseases. It is unfortunate that many of the contributors to the symposium have omitted some of the accepted views of others, but that cannot be considered a fault. There are some chapters that could not be improved upon, as they are notable in comprehensiveness and recognition of the latest thought on the subject. There are other chapters not so admirable. We prefer to consider the book as a whole and approve of it as a very valuable addition to the physician's library.

STONE AND CALCULOUS DISEASE OF THE URINARY ORGANS. By J. Swift Joly, D.D., F.R.C.S., Surgeon to St. Peter's Hospital for Stone, Consulting Urologist to St. James Hospital, Wordsworth. Published by C. V. Mosby, St. Louis. Price \$16.00.

This volume of 555 pages is the first in English devoted to the subject of stone exclusive to appear in twenty years. It is a work of outstanding importance, the production of which has required years of study of the problems of urinary calculus, and it manifests unusual qualities of scientific attainment and painstaking effort on the part of the author. His wide clinical experience in St. Peter's Hospital has fitted him especially for the task.

The book opens with an historical sketch of picturesque strangeness and interest. The chapters that follow are devoted to the composition and formation of calculi, a general classification of calculi, the etiology of stone, renal calculus, ureteral calculus, calculus anuria, vesical calculus, prostatic calculi and urethral calculi. The wealth of detail with which these subjects are discussed is enhanced by many illustrations and the author has made extensive reference to the literature. The reader will be impressed with the author's grasp of the subject, especially in the chapters devoted to the composition and formation and the etiology of stone. A most comprehensive treatise upon the topics of renal, ureteral, vesical and prostatic calculi is given.

The book will receive enthusiastic acceptance by urologists especially, and all others interested in the scope of the work.

H.G.H.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

GELATIN COMPOUND PHENOLIZED-MULFORD.—A mixture composed of gelatin, zinc oxide, glycerin, and water, containing 1.5 percent of phenol. It is used in the preparation of bandages to cover chronic ulcers, unhealed

secondary burns and the preparation of pressure bandages for varicose veins when surgical treatment is not necessary. H. K. Mulford Co., Philadelphia.

DIPHtheria Toxoid-MULFORD, 30 CC. VIAL.—Diphtheria Toxoid-Mulford (New and Nonofficial Remedies, 1929, p. 369) is also marketed in packages of one 30 cc. vial. H. K. Mulford Co., Philadelphia.

TYPHOID - PARATYPHOID PROPHYLACTIC, HOSPITAL PACKAGES.—Typhoid paratyphoid prophylactic (New and Nonofficial Remedies, 1929, p. 379) is also marketed in hospital size packages containing ten complete immunizations. The Cutter Laboratory, Berkeley, California.

AMPOULE SOLUTION SILVER NITRATE 1 PERCENT-CUTTER.—Solution silver nitrate 1 percent, approximately 0.2 cc., contained in ampules composed of beeswax. They are used for the prevention of ophthalmia neonatorum. Cutter Laboratory, Berkeley, California.

MERTHIOLATE.—SODIUM ETHYLMERCURI THIOSALICYLATE.—Merthiolate contains from 49.15 to 49.65 percent of mercury in organic combination. Merthiolate is a potent germicide for spore-bearing and non-spore-bearing bacteria. It is used for sterilizing tissue surfaces. It does not precipitate with serum proteins. Merthiolate is much less toxic than mercuric chloride. Merthiolate is supplied in the form of merthiolate solution 1:1,000, containing 1 gram of merthiolate in 1,000 cc. of water, buffered with 1.4 Gm. of sodium borate in 1,000 cc. and containing sodium chloride to make the solution approximately isotonic. Eli Lilly & Co., Indianapolis.—(*Jour. A. M. A.*, December 7, 1929, p. 1809).

POLLEN EXTRACTS-MULFORD.—The following pollen extracts-Mulford (New and Nonofficial Remedies, 1929, p. 33) have been accepted: Alder Pollen Extract-Mulford; Alfalfa Pollen Extract-Mulford; Annual Sage Pollen Extract-Mulford; Apple Pollen Extract-Mulford; Aster Pollen Extract-Mulford; Blue Beech Pollen Extract-Mulford; Boneset Pollen Extract-Mulford; Brown Grass Pollen Extract-Mulford; Burning Bush Pollen Extract-Mulford; Burweed Marsh Elder Pollen Extract-Mulford; Buttercup Pollen Extract-Mulford; California Mugwort Pollen Extract-Mulford; Careless Weed Pollen Extract-Mulford; Cedar Tree Pollen Extract-Mulford; Clover Pollen Extract-Mulford; Crab Grass Pollen Extract-Mulford; Dahlia Pollen Extract-Mulford; Dragon Sage Pollen Extract-Mulford; Elm Tree Pollen Extract-Mulford; English Plantain Pollen Extract-Mulford; Fescue Pollen Extract-Mulford; Golden Glow Pollen Extract-Mulford; Hickory Tree Pollen Extract-Mulford; Milo Maize Pollen Extract-Mulford; Mock Orange Pollen Extract-Mulford; Oat Pollen Extract-Mulford; Olive Pollen Extract-Mulford; Pecan Tree Pollen Extract-Mulford; Pine Tree Pollen Extract-Mulford; Poverty Weed Pollen Extract-Mulford; Prairie Grass Pollen Extract-Mulford; Privet Pollen Extract-Mulford; Quack Grass Pollen Extract-Mulford; Rabbitt Brush Pollen Extract-Mulford; Rose Pollen Extract-Mulford; Salt Bush Pollen Extract-Mulford; Shad Scale Pollen Extract-Mulford; Sheep Sorrel Pollen Extract-Mulford; Slender Ragweed Pollen Extract-Mulford; Spring Amaranth Pollen Extract-Mulford; Sudan Grass Pollen Extract-Mulford; Velvet Grass Pollen Extract-Mulford; Western Giant Ragweed Pollen Extract-Mulford; Wheat Pollen Extract-Mulford; Wild Oats Pollen Extract-Mulford; Willow Tree Pollen Extract-Mulford; Winter Grass Pollen Extract-Mulford; Yellow Foxtail Grass Pollen Extract-Mulford. These pollen extracts are marketed in 5 cc. vials containing 500 units per cc. H. K. Mulford Co., Philadelphia.

POLYANAEROBIC ANTITOXIN.—An anærobic antitoxin (New and Nonofficial Remedies, 1929, p. 346) prepared by immunizing horses with the toxins of *B. tetani*, *B. Welchii*, *Vibrio septique* and *B. oedematiens*. It is marketed in bottles containing 100 cc., each 100 cc. containing at least 5,000 units of tetanus antitoxin, 75 units of Welch bacillus antitoxin, and sufficient antitoxin to neutralize 50,000 minimum lethal doses of *Vibrio septique*

toxin and 100,000 minimum lethal doses of *B. oedematiens* toxin. Cutter Laboratory, Berkeley, California.

NORMAL HORSE SERUM WITHOUT PRESERVATIVE.—A normal horse serum (New and Nonofficial Remedies, 1929, p. 344) marketed in packages of one vial containing 100 cc. H. K. Mulford Co., Philadelphia.

THOMPSON'S MALTOSE AND DEXTRIN.—A mixture containing maltose, 51 percent; dextrine, 45 percent; sodium chloride, 2 percent; and moisture 2 percent. On the claim that maltose is more readily assimilated than other forms of sugar, Thompson's maltose and dextrin is proposed to supplement the carbohydrate of cow's milk or of water modifications of cow's milk. Thompson's Malted Milk Co., Inc., Waukesha, Wis.—(*Jour. A. M. A.* December 21, 1929, p. 1971).

PROPAGANDA FOR REFORM

INTRAMUSCULAR IRON ARSENIC COMP. (No. 201) AND (INTRAVENOUS) IRON, CACOD. AND GLYCEROPHOSPHATE (No. 202) NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that a circular with the caption "Formulas of definite therapeutic value" issued by Sci-Medico, Inc., New York, lists an extensive line of preparations marketed in the form of ampules and intended for intramuscular and intravenous administration and includes the following as having "proved useful in the treatment of anemia, nervous debility, neurasthenia, chlorosis and wherever a general tonic is indicated": (Intramuscular) Iron, Arsenic Comp. (No. 201), each 5 cc. ampule being stated to contain Iron Cacodylate $\frac{1}{4}$ grain, Sodium Cacodylate $\frac{3}{8}$ grain, Sodium Hypophosphite $\frac{3}{16}$ grain, Manganese Hypophosphite $\frac{1}{24}$ grain, Sodium Citrate $\frac{3}{8}$ grain, and (Intravenous) Iron, Cacod. and Glycerophosphate (No. 202) each 5 cc. ampule being stated to contain "Iron Cacod. (Colloidal)" 1 grain, Sodium Cacodylate 4 grains, Sodium Glycerophosphate $1\frac{1}{2}$ grains. The Council declared these preparations unacceptable for New and Nonofficial Remedies because they are irrational mixtures marketed with unwarranted therapeutic claims.—(*Jour. A. M. A.*, December 7, 1929, p. 1809).

TUCKER'S ASTHMA SPECIFIC.—The continued exploitation of this cocaine mixture is a standing disgrace to the federal authorities. The nostrum carries a label admitting the presence of 5 grains of cocaine to the fluid-ounce. When the Commissioner of Internal Revenue was asked in 1922 how such a product could be sent without violating the Harrison Narcotic Law, his reply was that the cocaine in the remedy became hydrolyzed before it reached the public, and that when used there was either no cocaine or a very small quantity. This commissioner, at the same time, also gave a fulsome puff for the nostrum expressing the opinion that the mail-order distribution of this product served "a great humanitarian cause" and, for that reason, the Treasury Department was taking no action. This in spite of the fact that the product obviously violates the Harrison Narcotic Law, for if it does not actually contain cocaine it admittedly contains a derivative of cocaine, to which the law also applies. Furthermore, if the product does not contain 5 grains of cocaine to the ounce, then it violates the National Food and Drugs Act.—(*Jour. A. M. A.*, December 7, 1929, p. 1829).

ZONITE DECLARED MISBRANDED.—Zonite is another of the many hypochlorite preparations which arose from the work of Carrel and Dakin during the war. It has been advertised like a typical "patent medicine" under the firm name of the Zonite Products Co. The propaganda for Zonite is, in effect, capitalization on the work of Carrel, Dakin and others, and the method of exploitation has been that typical of the nostrum business. Chemically, Zonite, after dilution with equal parts of water, is claimed to be essentially the same as surgical solution of chlorinated soda. According to a recent notice of judgment, Zonite was declared misbranded in that certain statements were false and misleading. Zonite has been exploited to

both the physician and the public. It goes without saying that it has not been accepted by the Council on Pharmacy and Chemistry for inclusion in New and Nonofficial Remedies.—(*Jour. A. M. A.*, December 7, 1929, p. 1830).

TREPARSOL.—Treparsol differs from the better known acetarsone in that it has a formyl group in place of the acetyl group of acetarsone. Its oral use, as with acetarsone, in the treatment of syphilis is not supported by adequate evidence. Treparsol has not been accepted by the Council on Pharmacy and Chemistry.—(*Jour. A. M. A.*, December 7, 1929, p. 1830).

UVIOL-JENA ULTRAVIOLET TRANSMITTING GLASS ACCEPTABLE.—The Council on Physical Therapy reports that the window glass known as Uviol-Jena, manufactured by Schott and Gen., Jena, Germany, and submitted to the Council by the Fish-Schurman Corporation, New York, is stated to be "a glass which transmits the biological ultraviolet rays of the sun" and "in a thickness of 2 millimeters transmits at the time of installation about sixty percent of the ultraviolet rays of a wave length of 302 millimicrons" and "even after 'solarization' it still transmits about forty-eight to forty-five percent of these same rays." The Council reports that acceptable evidence in favor of these claims was submitted and hence declares it acceptable for inclusion in its list of accepted devices for physical therapy.—(*Jour. A. M. A.*, December 14, 1929, p. 1887).

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the Food, Drug and Insecticide Administration of the United States Department of Agriculture which enforces the Federal Food and Drugs Act; Flu-Zone (R. B. Pettijohn Company), consisting essentially of ammonium chloride, ammonium carbonate, menthol, chloroform and traces of plant drug extractives, with alcohol, sugar and water. Optolactin Tablets (Fairchild Bros. and Foster) containing an insufficient number of organisms (*bacillus bulgaricus* and *bacillus acidophilus*). Adamson's Botanic Cough Balsam (F. W. Kinsman Company) consisting essentially of a syrup containing red pepper, tartar emetic, guaiac and other resinous material, a trace of alkaloids, water and a small amount of alcohol. Inflammacin (Math-Ol Inflammacin Company) an ointment having a petrolatum base and containing the usual menthol, camphor, oil of wintergreen and volatile oils, including spearmint and eucalyptus. Haywood's Cold and Grippe Tablets (W. R. Warner and Company, Inc.) containing the alkaloids of cinchona, gelsemium and aconite, together with camphor, red pepper and aloes. Lungremed (W. D. Stokes) consisting essentially of ammonium and potassium salts, carbonates, iodides and creosote flavored with oil of peppermint. Iophene (The Mayer Bros. Drug Company) consisting essentially of small amounts of carbolic acid, iodides and menthol in water. Warren's Wonder Workers (S. Pfeiffer Manufacturing Company) containing acetanilide, quinine, sodium and potassium salts, bromides and aloes. Owen's Oil (The Carolina Chemical Company) consisting essentially of lard, oil and some other fatty substance containing a small amount of menthol. Fluco (The Fluco Laboratories, Inc.) a liquid containing glycerine and alcohol together with acetanilid, ammonium carbonate, camphor and benzoic acid. Buddies (The Buddies Company) consisting essentially of aspirin (5½ grains), caffeine (½ grain), red pepper and salicylic acid. (*Jour. A. M. A.*, December 14, 1929, p. 1903.)

MEDICAL TREATMENT FOR CATARACT.—About every five years, the ophthalmic world is thrilled by the announcement of a new medical cure for senile cataract. This has been going on for at least two hundred years. Boric acid and glycerin, ethylmorphine hydrochloride, subconjunctival injections of mercuric cyanide, radium, antigenic injections of lens proteins, mixed endocrine glands, sodium iodide in all possible combinations, and so

on have all had a trial. Not one of them has been scientifically established as of value and more cataracts are being operated on than ever before. (*Jour. A. M. A.*, December 14, 1929, p. 1910.)

BICHLORIDOL.—Bichloridol is a proprietary preparation of corrosive mercuric chloride suspended in a "palmitin" base, intended for intramuscular administration. It is sold in compressible ampules called collapsules. This preparation was formerly marketed by the H. A. Metz Laboratories, Inc., but is now marketed by the Duke Laboratories, Inc. In 1925 the Council on Pharmacy and Chemistry rejected Bichloridol because it was marketed with indefinite statements of composition and under a non-descriptive name. The A. M. A. Chemical Laboratory reports that it analyzed Bichloridol because of inquiries received, one inquirer writing, "One-half to one grain a week gives practically no reaction and likewise mighty little therapeutic effect." The Laboratory found the preparation to contain only from one-fifth to one-tenth of the mercuric chloride claimed. The Laboratory points out that a discrepancy of this magnitude is inexcusable and comments on the desirability of physicians confining their use of proprietary preparations to products accepted for New and Nonofficial Remedies. (*Jour. A. M. A.*, December 21, 1929, p. 1971.)

THE HOROVITZ PROTEINS AND LIPOIDS AGAIN.— "Lipoidal substances" and "protein substances" are marketed under various names by variously named firms. Always, apparently, the chemistry is performed by and the claims are made through A. S. Horovitz. In 1915 it was an alleged cancer cure "Autolysin", a poultice or extract made from a number of herbs. Then came the "Proteogens" of the William S. Merrell Co., reported on unfavorably by the Council on Pharmacy and Chemistry in 1918. They were numbered, different ones being for the treatment of different diseases. These mixtures of vegetable proteins were exploited to physicians by a sad outpouring of pseudoscience. Next Horovitz became identified with the Horovitz Biochemical Laboratories, with a line of "Protein Substances" similar to the "Proteogens", each claimed to be more or less specific for some disease. Now the successor to the Horovitz Biochemical Laboratories is the Lipoidal Laboratories, Inc., and a number of supply houses act as agents for the firm. "Gonolin", "Luesol", "Osmogen", "Arthritine", "Asthazine" and other preparations similar in stated composition and therapeutic claims to the Proteogens are now promoted for physicians who think that the "bosh" in the circulars is good science because it is so confusing that it is not comprehensible. (*Jour. A. M. A.*, December 21, 1929, p. 1975.)

THE INFLUENZA DISCOVERY (?)—With little if any apparent warrant, it is again announced, for at least the tenth time in five years, that the causative organism of influenza has been discovered and that it is hoped to prepare a vaccine. There is thus far little or no evidence to indicate that I. S. Falk, Ph. D., and his associates have progressed any further toward the solution of this problem than have workers in other parts of the world, now or in the past. (*Jour. A. M. A.*, December 21, 1929, p. 1975.)

COLLUM'S DROPSY REMEDY.—For some years the Collum Dropsy Remedy Company, of Atlanta, Ga., has been selling on the mail-order plan, an alleged cure for dropsy. The remedy consists of three boxes of large pills, or boluses, and five bottles of liquid preparation. The pills, or boluses, are known as "Remedy No. 1"; then there are two bottles of "Remedy No. 5", two bottles of "Remedy No. 6", and one bottle of "Remedy No. 7". The preparations were examined in the A. M. A. Chemical Laboratory. The boluses were found to consist essentially of a phlobaphen—that is, of anhydrides of tannin—to which had been added extract of licorice, a flavoring agent and minute traces of inorganic salts. Remedy No. 5, sold with the claim that it will purify the blood and strengthen the entire system, was evidently a syrup of ferrous iodide. Remedy No. 6, sold "for the stomach

and digestion", was found to be a syrup of ammonium hypophosphite. Remedy No. 7, which the manufacturer declares will "relieve the cough that accompanies dropsy in a few days", was simply syrup to which had been added muriate of ammonia. It is obvious that whatever results are obtained in the reduction of the dropsical condition are due not to the Collum preparation but to the heavy and repeated doses of epsom salt, or other salines, that the victim is instructed to take at hourly intervals following the ingestion of the Collum boluses! As to the business itself: Dropsy, being a symptom and not a disease and usually the result of incompetent heart or kidney action, is quite evidently not a condition that should be self-treated. The sale of remedies for the alleged treatment of dropsy is without justification. (*Jour. A. M. A.*, December 21, 1929, p. 1990.)

COMPOSITION OF STER-TABS.—These tablets, to be added to water in which instruments are to be sterilized, are claimed to be composed of: Sodium carbonate (Monohydrated) 18 grs. and Sodium Nitrite $7\frac{1}{2}$ grs. per tablet. (*Jour. A. M. A.*, December 21, 1929, p. 1993.)

THE ETIOLOGY OF INFLUENZA.—I. S. Falk and his colleagues publish a preliminary report of their work on the etiology of influenza which does not go far beyond previous research on influenza. The difficulty in interpreting the results is largely due to the fact that it is difficult to distinguish clinical epidemic influenza from acute respiratory infections in monkeys and, indeed, in man. In 1892 Pfeiffer described an organism as the causative organism of influenza and since that time other allegedly causative organisms have been described. The green producing streptococcus isolated by Mathers and Tunncliffe in 1918, the one isolated by Rosenow in 1919, the filter passing organism described by Meyer in 1919, and the organism discovered by Olitzky and Gates called *Bacterium pneumosintes*, would seem to deserve as much consideration as should be given, at least on the basis of the available evidence, to the germ recently announced by Falk. (*Journal A. M. A.*, December 28, 1929, p. 2034.)

MALLOPHONE.—Mallophone is the proprietary name under which the Mallinckrodt Chemical Works markets an azo dye of the pyridine series. The patents on the product are owned by another corporation and the Mallinckrodt firm manufactures it under license from the holding company. It is regrettable that the Mallinckrodt Chemical Works sees fit to use for this preparation a different proprietary name from that used by the patent owners. The use of a number of proprietary names for identical products creates chaotic conditions. Mallophone has not been submitted to the Council on Pharmacy and Chemistry, although the firm which owns the patent has submitted its product to the Council. The Mallinckrodt firm does not appear to have presented evidence to justify the medical claims which it advances. It is to be regretted that the Mallinckrodt Chemical Works offers its product to the medical profession without first submitting it to the Council on Pharmacy and Chemistry—a recognized body working in the best interests of both the profession and the public health. (*Jour. A. M. A.*, December 28, 1929, p. 2044.)

PEDODYNE FOR BUNIONS.—The "Kay Laboratories" of 180 North Wacker Drive, Chicago, is the trade style used by one George J. Katz in selling quack remedies for bunions, corns, chilblains and perspiring feet. The name of George J. Katz is not unknown to quackery. The name of Katz does not appear in the advertising of the Kay Laboratories. Instead the circular letters are signed "George J. Kay", who, doubtlessly is non-existent. In order that the public and medical profession might know something about this "most scientific" treatment for bunion trouble, the A. M. A. Chemical Laboratory analyzed "Pedodyne." From its analysis, the Laboratory concludes that a product having the essential composition of the ointment part of Pedodyne for Bunions may be made by melting 300 parts by weight of ani-

mal fat and adding 3.6 parts by weight of salicylic acid, 3.5 parts by weight of phenol and one part by weight of iodine, to which is added a relatively small amount of camphor and menthol. The Laboratory concludes that a preparation having the essential composition of Pedodyne Foot Aid—which accompanies the ointment—may be made by mixing together talc, 40 parts, boric acid, 40 parts, borax 10 parts, alum, 5 parts, zinc oxide, 3 parts, salicylic acid, 1 part. That the use of these preparations will cure any case of hallux valgus (bunion) is a claim that to physicians is obviously false. (*Jour. A. M. A.*, August 11, 1928, p. 415.)

CAUSYTH FOR RHEUMATISM.—An article in an Austrian medical journal reports the use of "Causyth." No definite statement in regard to the composition of Causyth is contained in the article. The product is vaguely described as "zyklohexatrikupyridin sulfonsaures Pyrazolderivat." A note on the use of Causyth in grippe has also appeared in a German medical journal. The product does not appear to be marketed in the United States and no firm has requested its consideration by the Council on Pharmacy and Chemistry. (*Jour. A. M. A.*, August 11, 1928, p. 418.)

"DENICOTINIZED" TOBACCO.—So-called denicotinized tobaccos and tobacco products for which reduced nicotine content is claimed or implied by label declaration are now being offered for sale. Some of these are claimed to be "absolutely harmless." The Connecticut Agricultural Experiment Station has published a report on denicotinized tobaccos which shows that the nicotine content of these products varies considerably just as in the case of ordinary tobaccos. As a group they were found to contain somewhat less nicotine than tobacco. Some "denicotinized" products on sale contained as much nicotine as is likely to be found in ordinary tobaccos; a few contained substantially less. None of the "denicotinized" tobaccos examined are sufficiently poor in nicotine to warrant unrestricted indulgence on the part of consumers who suffer ill effects from this alkaloid. It is pointed out that the consumer of "denicotinized" tobacco products may consume larger quantities than of the ordinary product, partly because he believes it to be largely or entirely freed from its objectionable nicotine, and partly in an unconscious effort to secure the satisfying effects he is accustomed to derive. Consequently his actual nicotine intake may equal or exceed his usual consumption. (*Jour. A. M. A.*, August 18, 1928, p. 501; August 25, 1928, p. 583.)

THE ACTION OF GLYCEROPHOSPHATES.—The general consensus of critical opinion is that the theory under which the glycerophosphates were introduced into medicine is fallacious and that they are useless as tonics. Whatever effects are observed from the mixtures in which these sales are generally buried, may be safely ascribed to the other ingredients. (*Jour. A. M. A.*, August 18, 1928, p. 515.)

TREATMENT OF TAPEWORM IN A CHILD.—To children, oleoresin of aspidium may be prescribed in doses of 0.5 Gm. per year of age but not exceeding a maximum dose of 5 Gm. The preparation should include saline catharsis for several days previously, light diet for the day before, and a liberal dose of magnesium sulphate (from 5 to 10 Gm.) and an evacuent enema the evening before the treatment. (*Jour. A. M. A.*, August 25, 1928, p. 584.)

USE OF COMBINATION OF BARBITAL AND AMIDOPYRINE.—There seems to be no reason to doubt that a mixture composed of one of the analgesic drugs, such as amidopyrine, acetylsalicylic acid, acetanilid or acetphenetidin, and a hypnotic drug of the barbitol type is more effective in relieving pain than is either of the components alone. This type of mixture was popularized apparently, if not originated, by von Noorden who reported that a mixture containing 0.3 Gm. of barbitol, 0.25 Gm. of acetphenetidin and from 0.0025 to 0.03 Gm. of codeine was equal in effect to 0.6 Gm. of barbitol without the side action of the latter, but he did not

present satisfactory evidence in support of that statement. At present there is a large number of proprietary remedies of this general type on the market. There has been apparently no satisfactory clinical comparison of the pain-relieving power of any of these preparations with that of the simple analgesics. A mixture of barbitol and amidopyrine is probably as useful as any of the expensive proprietary preparations of this type. The action of the hypnotic may outlast that of the analgesic; hence they may be used separately, the analgesic being repeated more frequently than the hypnotic. (*Journal of the A. M. A.*, August 31, 1929, p. 713).

ACRIFLAVINE HYDROCHLORIDE AND ACRIFLAVINE BASE.—When first used, acriflavine base was called "trypanflavine" by Ehrlich. In England and in this country, however, the hydrochloride is commonly known as acriflavine, although the free base (which has also the designation "neutral" acriflavine) sometimes goes under the same name. Because the standards for these dyes which had been adopted by the Council on Pharmacy and Chemistry in 1919 had been found inadequate and because some American authors had asserted that the foreign product was superior to the domestic, the American Medical Association Chemical Laboratory undertook an extensive investigation of the composition of the dyes. As a result of the comparison of the various European and American brands of acriflavine hydrochloride and acriflavine base it is concluded that there is not sufficient difference in the purity to justify the statement that the foreign product is superior to the domestic, even though at times the brands differ in appearance. The work of the Laboratory emphasized that a solution of acriflavine hydrochloride is distinctly acid in character. Even a solution of acriflavine base imparted an acid reaction in the range of a pH from 3 to 5. Two years ago, after these investigations were started, the Council on Pharmacy and Chemistry adopted for New and Non-official Remedies the scientific names acriflavine hydrochloride, for the product generally known as acriflavine, and the scientific name acriflavine base for "neutral" acriflavine, and the completed work of the Laboratory emphasizes the importance of the adoption of these names by physicians in their prescriptions and their publications. (*Journal of the A. M. A.*, August 31, 1929, p. 695).

ABSTRACTS

STATUS OF THERAPEUTICS OF IRRADIATED ERGOSTEROL

ALFRED F. HESS, J. M. LEWIS and HELEN RIVKIN, New York (*Journal of the A. M. A.*, August 31, 1929), assert that further clinical experience with preparations of irradiated ergosterol has shown that it is a specific for rickets, tetany and osteomalacia. As yet it has not been proved to be of definite value in other clinical conditions. In the course of the past year, a standard dosage has been established for the prevention and for the cure of rickets. Premature and exceptionally rapid-growing infants must be regarded as a separate group and dosage gaged according to a different scale. The basis of this standardization is a biologic estimation of antirachitic potency rather than a gravimetric assay of the irradiated ergosterol. It has been found that, if the prescribed dosage is observed, neither toxic symptoms nor hypercalcemia need be feared. These phenomena seem to be entirely or almost entirely due to an excess of antirachitic action. Hypercalcemia can also be induced experimentally by giving undue amounts of cod liver oil. Irradiated milk, especially dried milk, is likewise a valuable product in combating rickets and tetany, more especially in their prevention. Irradiated cereals will probably play no role in the control of rickets. In view of the numerous technical difficulties involved in the course of activation, such

biologic products as irradiated ergosterol and irradiated foods should be subjected to careful laboratory control.

METHYL CHLORIDE POISONING FROM DOMESTIC REFRIGERATORS

ARNOLD H. KEGEL, WILLIAM D. McNALLY and ALTON S. POPE, Chicago (*Journal of the A.M.A.*, August 3, 1929), found that the narcotic properties of methyl chloride have been recognized for more than fifty years. Its toxicity is given as one-fourth that of chloroform. Recent carefully controlled studies in the U. S. Bureau of Mines show that exposures of from ten to twelve hours to concentrations of the gas as low as 0.12 or 0.15 percent are sufficient to produce death in guinea-pigs and that such exposure results in characteristic pathologic changes in the experimental animals. The authors reviewed the literature which showed forty-three reported cases of poisoning with one death from methyl chloride, incidental to its use in ice machines and refrigerators. During the past year there have been reported in Chicago twenty-nine cases of poisoning by commercial methyl chloride gas, resulting in ten deaths. Poisoning with commercial methyl chloride gas produces a characteristic clinical picture, of which the outstanding symptoms are drowsiness, mental confusion, coma, nausea, vomiting and in severe cases convulsions. The temperature, pulse and respiratory rate are all increased, and anuria usually occurs. The blood picture is suggestive of a primary anemia, with practically no regeneration during the first week. Hemoglobin falls with the red count and there is a moderate leukocytosis. The blood pressure is usually decreased. Examination of the urine indicates transient acute nephritis. Formic acid was found when the test was made early. The sequelae noted are suggestive of injury to nerve cells, followed by progressive degeneration. Human cases post mortem showed practically the same pathologic changes as experimental animals killed by exposure to low concentrations of methyl chloride gas. All cases of methyl chloride poisoning reported in Chicago have occurred in kitchenette apartments, having multiple unit refrigerator systems and where a leak was discovered in the apartment unit.

COTTONSEED AND KAPOK SENSITIZATION

A brief study made by GRAFTON TYLER BROWN, Washington, D. C. (*Journal of the A.M.A.*, August 3, 1929), of the tabulated data on the thirteen patients sensitive to cottonseed shows that the sexes were almost equally involved, namely, seven males and six females. The age of the patients varied from three to forty-nine years. As to the age of onset of the allergic symptoms, although it is not given in the table, nine started in the first decade, two in the second, and two in the third. As for the allergic manifestations, eleven of the patients had bronchial asthma, and the remaining two perennial hay-fever. Six of the eleven patients with asthma also had coryza, eczema, urticaria or angioneurotic edema. Brown asserts that sensitization to cottonseed and kapok is usually marked, and occurs with sufficient frequency to merit careful consideration, although little attention has been paid to it in the extensive literature on allergy. The ingestion of cottonseed products, or the inhalation of dust from cotton or kapok, is capable of causing asthma and other allergic manifestations in persons hypersensitive to these substances. Cottonseed and kapok sensitization may be determined with ease and safety by means of the cutaneous or "scratch" test. The cotton plant and the kapok tree are botanically related, and persons sensitive to cottonseed are frequently, although not necessarily, sensitive to kapok. On the other hand, kapok sensitization without coincident cottonseed sensitization probably does not occur. Nearly all patients with non-seasonal allergy should be tested as a routine with cottonseed protein. Kapok pillows should never be substituted for feather ones in feather-sensitive patients, until the possibility of kapok sensitization has first been

(Continued on Adv. Page XX)



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ABSTRACTS

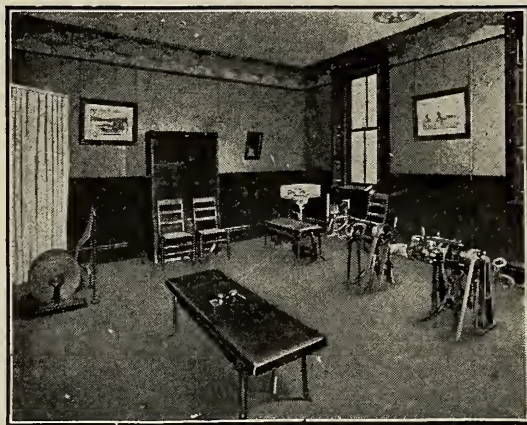
(Continued from page 112)

ruled out. Cottonseed and kapok hyposensitization by means of hypodermic injections of a cottonseed extract is possible, provided sufficient care and judgment are used in determining the correct initial dose, and in properly regulating the increases in dosage.

CLINICAL VALUE OF SERUMS AND VACCINES

The recent survey by Hektoen and Irons concerning the popularity of vaccines indicates that these agents are in disfavor with an overwhelming majority of physicians. RALPH A. KINSELLA, St. Louis (*Journal of the A. M. A.*, November 16, 1929), asserts that one has only to compare the catalogue of any prominent drug company of twenty years ago with the most recent catalogue of the same company to realize that the treatment of infectious diseases has been changed from one in which drugs played the most important part to one in which such biologic products as serums and vaccines have assumed a great prominence. A visit to the drug room of the average hospital confirms the idea that vaccines particularly are widely used. In towns of comparatively large size it may be impossible to find a package of type I antipneumococcus serum during the winter, although numerous preparations of vaccines and other so-called antigenic agents are always available. This condition reflects an attitude on the part of the physician which is due to the lack of uniform teaching regarding the nature of infection, its etiology and the means by which an infectious disease may be neutralized. The medical student hears contradictory evidence in many fields of bacteriology. At the same time the information which he receives concerning antigens and antibodies is so rigidly definite that he leans to a belief in specificity

and is inclined to accept as specific the various agents for immunization, however loosely supported they may be by the uncontrolled observations of clinicians or the claims of salesmen. The outstanding success of smallpox vaccine, the dramatic discovery of the Pasteur treatment and the apparent usefulness of typhoid vaccine and of vaccination with diphtheria toxin-antitoxin mixtures have led investigators to the hope and to a large extent to the belief that similar success may be obtained in the field of other infectious diseases. The manifest failure of most of the attempts to produce effective vaccines and serums emphasizes the fact that there are many features of an infectious disease that are still unsolved. There still are numerous infections concerning whose etiology dispute is prevalent. For many of these infections vaccine treatment has been devised by the original investigators, and for others vaccines are furnished by the manufacturers without much foundation in experimental facts. It is impossible to consider in detail all these instances, but when one considers the number of vaccines about which there is little or no dispute one finds oneself with few vaccines left, except those for smallpox, rabies, typhoid and diphtheria. Concerning the use of nonspecific vaccines, it can be said that definite clinical effects are produced frequently which lead both the patient and the physician to feel that some good has been accomplished. It has been shown, for example, that such nonspecific reactions may temporarily suppress a bacteremia, but the literature fails to indicate that the use of nonspecific products has produced permanently beneficial effects. These nonspecific reactions are still widely employed in the treatment of conditions such as chronic rheumatism. The continued use of these products need not be discouraged altogether, but it is far better to await the results of further studies by those whose lives are devoted to investigation of this type than to plunge madly into the promiscuous use of vaccines and serums.



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ORIGINAL ARTICLES

HYPERTENSION IN RELATION TO INDUSTRIAL EMPLOYMENT*

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INDIANAPOLIS

While vascular disease is as old as any of our accurate records, and volumes have been written on the subject since intensive study of the disease began about fifty years ago, yet it is only comparatively recently that industrial organizations have made serious attempts to cope in a systematic manner with the problem. It is from this angle that I wish to discuss the subject of hypertension at this time.

Great emphasis has been placed upon this interesting clinical condition since the common and accurate use of the sphygmomanometer. Life insurance companies early recognized its significance so far as their contracts were concerned. In the past few years industrial examinations have pointed out its importance to their organizations. There are those who may feel that too much stress has been placed upon the clinical condition hypertension. It is nevertheless very common, and is an economic problem as well as a health problem. Since nothing definite is known of its cause, no satisfactory plan can be made to prevent the condition. We must, however, try to recognize the condition early and to surround the individual unfortunate enough to have hypertension with protective measures to keep him in his best economic position. Life insurance companies recognize the limited expectancy of the possessor of hypertension and simply say to the unfortunate one, "We cannot accept you as a risk," or, if accepted, they put on a much higher premium rating. As to applicants for positions, industrial concerns in some instances recognize their limited endurance and physical possibilities and treat the problem in a similar manner. Some individuals already in a concern must be dealt with differently, and it is, of course, to the advantage of the company and individual both that the problem be met intelligently. If an insurance company has

such a risk it must continue to carry the contract. An industrial concern is obliged to do likewise with an efficient employee, for he represents an asset and usually a certain expense for training. They must, however, be protected from damages due to disease on the part of the employee.

In a not inconsiderable number, hypertension is either a part of or a complication of some other definite malady. There are the hyperthyroids, for instance, usually with high systolic and low diastolic pressures, or as some would have it, systolic hypertension. Such a problem, manifestly very complex, is one which is managed comparatively easily from the employer's viewpoint, namely, that the individual be relieved from duty until the medical problem is handled satisfactorily. Often a course of treatment is indicated very definitely and when completed the individual ceases to be a liability and becomes an asset. By special periodic examinations the condition is recognized sooner than usually would be the case, and more definite information as to the employee's progress and usefulness after a course of treatment can be ascertained.

A similar type of hypertension is to be found in the aortic insufficiency cases. The problem in such events hinges on the underlying status of aorta, heart and other related changes. Such individuals as a rule do not offer much to their employers as assets, and their period of usefulness is much limited. For the sake of completeness we may here mention the other common type of systolic hypertension—that which is found commonly in individuals above sixty years of age with marked sclerosis of the radials, temporals, and other peripheral arteries with comparatively little involvement of retinal vessels. From the subject at hand, however, this is not so important a problem, as the retirement age of the individual is not so far distant, and the general peculiarities of age already have placed him in a type of work less strenuous. Furthermore, hypertension of this type runs a rather benign course.

In the large group in which the etiology is vague, or that which is classified as essential hypertension, the problem is much more complicated. It is sometimes a guess as to what will happen in an individual case. A type spoken of

*Presented before the Section on Medicine at the annual session of the Indiana State Medical Association, September, 1929.

by Keith and others as malignant hypertension is a fairly clear one, *i. e.*, those with very high blood pressure, both systolic and diastolic, and usually with marked retinal changes as hemorrhages, exudates and edema. They are likewise emotionally unstable, and given to attacks of extreme headache and transient symptoms of numbness or weakness of an extremity. The same authors have shown that the expectancy of life in such is, at best, not over a few months to two or three years. Hence it is important to the employer and employee alike that the latter be relieved of duty, thus removing the former's liability of inefficient work and tending to prolong the latter's life. Observation shows that such an individual has lost much of his efficiency and hence is a potential source of danger to other individuals whose safety in part at least depends upon him. Great strides have been made in safety devices in machinery and accidents lessened very materially. There still remains a large man-power factor many of the uncertainties of which are due to disease.

The large group, however, comprises those individuals with incipient hypertension whose efficiency in work is not impaired. The disease in many of these is so slowly progressive that many years of useful activity still remain. To bar such an individual from a piece of work in which he has become skilled, often after years of apprenticeship, would mean serious loss to the industry and a cruel penalty to him. If one considers the dependent families, a serious social problem also is involved. To judge one of these individuals properly necessitates on the part of the examiner a very careful history, including family history, habits, etc., and a complete physical examination. Most concerns have records which, in addition, show the employee's efficiency, his peculiarities and behaviour in work. Incidentally, the paucity of symptoms in such an individual as compared to those recited by patients in private practice might be noted. One usually must wonder whether these men, more or less active physically, actually have no symptom or whether they are concealing the truth in a subconscious way to retain their positions; or whether those in private practice, more likely in sedentary occupations and with more mental activity, actually notice more accompanying symptoms.

Some of the details of this physical evaluation may not be considered. Many are very large men, tall and often overweight or obese, and often having large appetites. They are almost universally very conscientious about their work, have a heavy sense of responsibility and have a pretty high nervous tension.

There are many doctors who consider heredity the most important etiological agent. The incidence of the condition in families is very striking. In one of my cases, a man of fifty-four with a blood pressure of 280-165, there was history of

his father and five brothers dying of vascular causes before sixty years of age. Such a history must be important.

The question is often asked what would you consider the dangerous limit of blood pressure in a particular employment. Such a questionnaire was sent out from a very large corporation within the past year. The problem is manifestly not so simple as that.

As has been shown, hypertension is sooner or later accompanied by changes in the smaller arteries and arterioles, and tends to have a progressive course. Numerically Faber found about as follows: two-thirds of the cases show vessel changes in the kidney; one-half in the spleen; one-fourth in the liver and pancreas and one-fifth in the brain. Fishberg found early changes in the arterioles of kidney in practically all cases.

With a little practice a fair idea can be obtained as to the condition of the vessels of the brain by ophthalmoscopic examination, and in doubtful cases the services of a competent oculist can be enlisted. This is said by O'Hare and others to be so accurate that a pre-existing hypertension can be surmised with a fair degree of accuracy. Agatston has found that the height of blood pressure is roughly proportional to the retinal changes. The same was true for non-protein nitrogen content of the blood. Often symptoms of localized ischemia or hemorrhage in the brain such as numbness or weakness in an extremity or about the face augment this picture. Occasionally severe headaches definitely localized and of neuralgic character occur. Fits of temper and extreme nervous irritability may accompany this with marked retinal changes and with such a history a bad prognosis usually is justified.

The hard problem, the danger of sudden death, requires careful consideration: Cerebral hemorrhage and coronary closure are most frequent causes of sudden death, and represent a potential danger to many lives and gross destruction of property. As to question of sudden death, in a group of fifty special examinations chiefly of locomotive engineers, five died suddenly, two of angina, two of apoplexy and one of aneurysm. LeCount has reported recently three deaths due to natural causes while driving automobiles and presumably killed by accident. Romberg's statistics show that forty-five percent of hypertensives die of apoplexy, and Fahr thirty-five to forty percent. Christian reports that twenty-five percent of his group die of cerebral lesions. He also found that one case out of four died of causes unrelated to hypertension, or, in other words, lived out their normal expectancy. Of cardiac deaths in hypertension Willius found thirty-one percent died suddenly and sixty-nine percent of gradual failure. If an individual with hypertension escapes apoplexy and renal failure and lives long enough he

most certainly will develop cardiac failure. In round numbers about one-third of the cases of cardiac disturbance will die a sudden death. This, coupled with the fact that from one-fourth to one-half of the cases die of apoplexy, makes the danger of sudden death a real one. If such an individual operate machinery, has charge of controls, or drive a locomotive or automobile, the danger of disaster to a number of individuals is apparent. These must if possible be prevented, and such individuals weeded out. An accurate prediction cannot be made in all cases, but certain data serve as a warning. Many of the individuals have certain characteristics, making them of the definite apoplectic type. I refer to the rather short, stout, obese, ruddy-faced individual with hypertension. Thirteen of fifty cases observed in this study were of this type.

Approximately ten percent of hypertensives develop and die from renal failure. Usually urine examinations, coupled with functional studies, and not necessarily complicated ones, give a fair idea as to this. Often symptoms themselves are sufficient to take the sufferer out of employment. Retinal changes in this group are usually quite marked. With this picture and any of the definite findings, retinal or arteriolar changes—anginal attacks, diabetes or syphilis—the way seems clear.

The danger from sudden death from the heart is rather difficult to appraise. Of the fifty cases observed two had definite anginal attacks, especially of the effort type. One was retired and the other taken out of employ temporarily. He died suddenly a week later following a quarrel with a fellow employee.

Coronary sclerosis in hypertension is the rule: According to Bell's figure only thirteen percent are without it and thirty-five percent show moderately severe and very severe sclerosis. Heart size, changes in rhythm, tachycardia (Granger considers a persistent pulse rate of 100 or over as definite evidence of cardiac weakness) and various other signs of cardiac strain must be searched for carefully. Often a readjustment of work or a period of rest in a doubtful case prolongs life and usefulness a long time.

Wide variations in blood pressure within comparatively short periods of time add to the examiner's difficulty. Often a man is referred for study because a very high blood pressure has been noted only to be found to have a normal pressure at the time of special examination. On the other hand, this wide variation of blood pressure may account in some measure for many of the so-called improvements found. A difference in blood pressure in right and left arms is the rule and this variation may be as much as forty mm. It has been suggested that this is a striking evidence of strong emotional or nervous factors at play. Variations from hour to hour, day to day, and week to week, occur and without relation to the mean

height of the blood pressure. One assumes that he sees the individual with his highest pressure at the time of examination, because of emotional stress and often after having traveled some distance. Not infrequently the apprehension as to his employment is an added factor. The vast majority of the individuals stated in their histories that they were unaware of hypertension until told so at time of periodic examinations.

Obesity in itself probably has little to do in the production of hypertension, yet when it occurs with hypertension, its load is added to the circulation and vascular system. Of 4,000 periodic examinations 117 cases of blood pressure of 160 mm. or over were found. Of the fifty which I examined approximately one-third were found markedly overweight and referred to their family physician for appropriate care. Most were good patients and some after four years are in much better physical condition than when first referred for care. Faber states that a drop in weight of eight to sixteen pounds causes corresponding reduction of blood pressure of fifteen to thirty mm. A definite drop was observed in at least ten of the fifty cases.

As to syphilis it is usually held that it has nothing to do in the production of hypertension, but when associated it certainly adds its concomitant deleterious influence. Thirteen of these cases were syphilitic. While the number is too small for definite conclusions, more vascular changes were seen in them. Even in this group appropriate treatment without question put a few of these men in much better physical condition.

Diabetes was an associated lesion in three of the fifty cases. There is a current idea that diabetes is more common among the hypertensions and that when present, arteriosclerotic changes are more marked. Adams in an analysis of a large group states that diabetes does not seem to promote hypertension and that when the latter is also present it suggests an independent lesion. Mosenenthal arrived at a similar conclusion.

The great majority of cases observed were carrying some foci of infection, some extremely marked. The family physician in many instances has these properly handled, and it seems when judiciously done there was definite improvement in the individual's general condition. Statistical evidence proving the value of such treatment is, of course, most difficult. If properly managed, operative procedures can be carried out safely provided heart function is good. Much comment has been made as to the success with which some of them withstand serious infectious diseases.

Finally, man is happier and in a much better frame of mind so far as his condition is concerned when working, and especially so when he is working at the trade or profession for which he has spent his best years in preparation. A sympathetic understanding of this on the part of the

employer, the examiner and the family physician is paramount.

In conclusion: Man power is coming in for more careful scrutiny in the industrial world just as machine power did in the past. Certain factors make this necessary:

1. The employer must have efficiency; he must avoid the heavy expense of preventable industrial compensation for injuries; he must surround his public with the greatest safety and prevent loss of property.

2. The employee must have opportunity where conditions will permit him to fulfill his ambition and purpose in life; to earn a livelihood for himself and family; and to educate his children in a useful walk of life.

3. Certain data are available in hypertension, as discussed before; retinal changes, evidence of heart embarrassment, evidence of kidney damage, obesity, syphilis, diabetes and infections which should help the physician to place the hypertensive in a position to fulfill the above obligations. The family physician must keep his patient in the best possible physical condition, and sympathetic co-operation of all parties is necessary to secure best results.

Grateful appreciation is hereby expressed for the help afforded by Dr. L. A. Ensminger's office.

DISCUSSION

HARRY W. GARTON, M.D. (Physician for General Electric Co., Fort Wayne): Dr. Ritchey has discussed in a very able manner the subject of hypertension. The few remarks I have to make will be entirely concerning the practical side as I have found it in industrial work. Anyone who does much industrial medical work realizes what an influence this condition has on the physical and economic welfare of the employee as well as on the activities of employers as regards the whole subject of initial employment, continuation of employment, compensation, pensions, etc. Dr. Ritchey discussed the subject from two standpoints, those of employer and of employee. He might well have added from the physician's standpoint. As a matter of fact the physician is more or less a bluffer, on the one hand championing the due rights of the employee and on the other hand acting as an adviser to the employer who usually has to pay the bill. I might say here that what remarks I have to make leave out of the picture compensation insurance companies, for my experience has been with a company that carries its own insurance and therefore bases its actions on direct advice from the medical profession, and I really believe that a company that sponsors its own medical activities and does not merely pass the problem on to an insurance company has a much better working knowledge of its medical problems. It is forced to recognize the problems of mortality and morbidity rates from various causes, and I believe it is much easier under these conditions to insti-

tute an industrial medical program. By an industrial medical program I mean not only the immediate care of accidents but a general supervision of working conditions and the general health of employees.

Hypertension, of course, is common in industrial employees; and because of its varied complications and possibilities of sudden death from terminal cardiac and cerebral accidents, it presents a problem to industrial employers (primarily to physicians), as to whether or not the particular patient should be employed at all, and if so, on what kind of a job. This problem is a medical one, and is too often relegated to someone who has no conception of the proper selection of jobs. As a particular instance of this fact, I think it is a rather common thing to place such a patient (cardio-vascular-renal) on a watchman's job, with the idea that this is the easiest type of work. Oftentimes the duties of such a job require the making of regular rounds through the factory every hour or so, in the aggregate totaling several miles a day, and requiring the climbing of long flights of stairs. I believe the proper selection of jobs is an important factor in safeguarding both the hypertension patient and his employer. Most large industries have diversified types of work and can, therefore, take care of such employees with a reasonable degree of safety. In other words, the fact that an employee has developed hypertension should not relegate him to the scrap heap of the unemployed. Such a practice I think only represents an apparently easy way out; in reality it complicates the industrial employment situation.

Personally, I see hypertension in several groups of cases:

1. Pre-employment group—not so common here because of age limit, but do see it not infrequently in these younger individuals, especially associated with aortic lesions in which, of course, syphilis is a common etiological factor. Employers are loath to accept such an employee into their organization because of the unfavorable prognosis, and because of the benefits which go with a job.

2. Routine examination of older factory employees. Examinations for employees engaged in hazardous occupations, lead workers, benzol workers, sand blasters, crane operators, etc. Many are unaware of the existence of cardio-vascular disease. They do not consult a physician until they have well-developed symptoms.

3. In examining the executive force. In the General Electric organization we are conducting yearly examinations by the family physician. Hypertension is not an uncommon finding in this group.

4. Finally, it is notoriously common in groups of men who are referred to examination for pen-

sion. Men who are about to be placed on the shelf. Rare not to find it in this group.

In trying to do justice to both employer and employee it would be a great aid if we had some practical yardstick which we could use in deciding the question of employment of this group of cases. In medicine we cannot formulate many set rules, but I have found that it does help to ask myself the question, "Does this man's physical condition make him a menace to himself, to his fellow-employees, or to company property?" Unfortunately, this question cannot always be answered definitely in our own minds, but asking it does serve to make us consider carefully all the parties involved.

From the employer's standpoint this subject is important not only for its medico-legal phase, but as a factor in causing lost time and in causing accidents. Industry is making a tremendous drive to reduce accidents, and in so doing it must take account of the physical condition of its working force.

As to the medico-legal aspect—many of these cases come before compensation boards for formal hearing. I am going to venture the opinion that a medical referee, perhaps attached to the Compensation Board, might go far toward rendering justice to both sides. It is the usual thing that doctors themselves do not agree on the question of liability in any given case, and I am sure it is asking a great deal to expect a layman, with no medical training, to weigh all the scientific evidence presented in such cases.

I am glad to have heard Dr. Ritchey present such a subject. I believe we must realize more and more how intimately present-day medical practice is influenced by modern industrial expansion.

F. B. WISHARD, M.D. (Physician for the Delco-Remy Corporation, Anderson): Dr. Ritchey has given us a very interesting talk on hypertension. There are several organizations in the state of Indiana that require the medical examination of candidates for employment, such as the Delco-Remy Corporation of Anderson, the Studebaker at South Bend, the General Electric at Fort Wayne, and others. Usually the man who has hypertension is not employed. He may be accepted if he is a toolmaker, but not if he is to be used for labor or other unskilled work. If he is accepted he is given a very special examination in the course of which the eye-grounds are checked, urine examined, etc. A record is kept and a statement is signed by him that as he has hypertension the company is not to be held liable for what might develop while he is on the company's premises. A definite record is kept of his blood pressure. And he is also subjected to periodic physical examination. Thus, while we do take on men with hypertension we are very careful as to whom we employ. We recently had two cases, both of whom

had hypertension, and both of whom had cerebral hemiplegia while in the shop. These both happened during working hours.

Another interesting thing is the point of view of many factory workers. A man would not steal \$10, but if he could sue a large corporation for \$10,000 he would do it. In the event of an accident the first thing the average man thinks of is how much money he can get.

Regarding the matter of periodic physical health examinations, I feel that a man who submits himself voluntarily for examination is of superior mentality. The man on the street, the man in a ditch, the laboring man, is not going to waste time going to a doctor unless he is really ill, and yet he is the one who most frequently gets into difficulty. I, therefore, believe that any organization which employs people can spend readily a few dollars to have a man examined rather than to have to settle the matter later in court. This is the end which many corporations are approaching rapidly. It is really remarkable how many men have hypertension, a condition which is first noted at the time of employment.

Another thing which many physicians overlook is the source from which the money with which the patient pays his bill came from. A doctor collects his fee and fails to appreciate the fact that the man had to be employed profitably in order to earn the money with which he paid the doctor, hence it is to the doctor's interest to keep the man physically fit for employment, and this can best be done by stressing the value of periodic health examinations. The obligation rests directly on the general practitioner, for the workmen's compensation acts of the various states are so exacting in their definition of the obligations of the employer as contrasted with those of the employee that it may be that in time employers in general, prompted by accident and compensation insurance companies, will refuse to employ all individuals having marked cardiac and cardiovascular pathology. Inasmuch as these diseases can be prevented in a large degree it becomes the obligation of the general practitioner to stress the value of periodic health examinations to all of his patients.

THE MANAGEMENT OF GOITER*

FRANK H. LAHEY, M.D.

BOSTON, MASSACHUSETTS

It seems to me that if I present this paper, discussing the various aspects of thyroid diseases as illustrated by slides, I can demonstrate this subject more tangibly to you. While I may not succeed in covering the entire subject, as we have been interested in such a variety of thyroid diseases, I would like to say something about every-

*Presented before the Surgical Section of the Indiana State Medical Association at the Evansville session, September, 1929.

thing that relates to thyroid diseases as far as I can.

In the classification of thyroid diseases, I would first like to speak of the colloid goiter. Colloid goiter is an accumulation of colloid within the acini of the glands. It is the earliest stage of goiter, and occurs most commonly in young girls, and is found symmetrically enlarging the thyroid throughout, without toxic symptoms. It produces no symptoms except when it goes behind the larynx and when it progresses into the thorax to produce intrathoracic goiter. (Illustrations were given by two slides representing a young girl of sixteen years of age without toxic symptoms.) This colloid goiter does not contain tumors. We must realize, however, that this type of goiter occurring in young girls frequently shows toxic symptoms. When it shows pressure it does not show pressure in the thorax, as other types of goiters, but shows pressure in the upper poles of the thyroid going behind the larynx. Now this girl, we believe, does not need to go about the community being the interest of all the youngsters. She can be relieved by operation, and because of this we think a colloid goiter of such size should be operated upon. There is but one thing from the cosmetic point of view: one should never remove all of the isthmus, in order to conserve the appearance of the neck. Here you see the natural isthmus which can be maintained by leaving a small segment of the thyroid on the isthmus.

We come next to the so-called adenomatous goiter. Adenoma of the thyroid is an area of thyroid tissue surrounded by a fibrous capsule. The size plays little part in the indication for operation. We have investigated the adenomatous goiters which we have operated upon and ninety-four per cent of cancer of the thyroid has arisen in the discrete fetal adenomata. Of 1,484 adenomatous goiters removed, ninety-two have proven malignant microscopically.

We used to be interested in the fact that on microscopic examination there was no evidence of malignancy, yet clinically it was malignant. We do not see involvement of the lymphatic glands with metastasis until the adenoma has perforated the capsule. If one in every seventeen is malignant, then we say that every man or woman who has a discrete adenoma of the thyroid should have it removed because of the danger of malignancy later. Nearly every patient who dies of cancer of the thyroid at some time had a previously benign adenoma. If it had been operated in time, that patient would not have died unnecessarily. If she or he had had the adenoma removed during its earliest stages, before malignant degeneration, the risk would have been only one-tenth of one per cent. Therefore, we feel that all discrete adenoma of the thyroid should be operated upon because one in every seventeen when removed has been malignant, and for that reason every patient of

twenty-five or over should have it removed.

In addition to that, we believe that large adenomatous goiters should be removed when they are unsightly appearing, when they cause pressure, and when causing toxicity.

(Illustration.) A young girl, nineteen years of age, in whom was shown a gradual growth of tumor on the back of the tongue which she has had from birth. It enlarged in size until it became difficult to swallow solid foods, then finally fluids. It had been punctured in several places and was extremely solid. We thought that it was a lingual goiter, as it originated at the base of the tongue. It was removed and produced myxedema, proving that it represented all of the thyroid.

Intrathoracic goiter has been an extremely interesting group to us. It is interesting to realize to what depths the goiter may go. Almost all the intrathoracic goiters are adenomata. They start as adenoma and by ascending and descending by swallowing, they finally slip down and become lodged in the mediastinum. The chest tapers backward so that once the adenoma is in the superior mediastinum, it rarely escapes. We have seen them descend as low as the tenth rib. They make a symmetrical outline. They usually produce some flattening of the trachea, and not infrequently they produce paroxysms of choking. Why should they produce intermittent choking? They narrow the trachea. The trachea is large enough to permit sufficient air to pass except when the patient gets tracheitis. Any patient who has intermittent choking and difficulty with breathing should have an x-ray and investigation as to the possibility of intrathoracic goiter. Any patient who has a goiter the lower poles of which are not palpable should have an x-ray.

Another x-ray of another intrathoracic goiter illustrates how low it may go. These intrathoracic goiters finally surround themselves with an area of condensed connective tissue. They can be separated out by the fingers, also they can be slipped out of the superior mediastinum usually without great difficulty. In a series of 250 intrathoracic goiters we had to split the sternum only twice to deliver the large mass. There is but one point in connection with surgical removal in intrathoracic goiters. All goiters get their blood supply from above. The blood-stream must come from the superior thyroid artery and inferior artery; therefore, the blood supply comes from above downward. If a segment is left behind, it is unnourished and is likely to produce a mediastinitis by sloughing in the mediastinum. Once the mediastinum becomes infected, it does not lend itself, in our experience, to any method of treatment, and all die. Therefore, one should see that insofar as possible all fragments are removed. These cavities must be packed and drained for a long time. They tend to fill up with fluid. We pack them in order to prevent mediastinitis.

Now we come to the toxic goiter. One hears a great deal of discussion of the so-called exophthalmic and so-called toxic adenoma. For my own personal opinion I would consider all toxic goiters under one head. We see the same elevation in pulse rate and the same heart states. It is true that exophthalmic goiter is known to occur in individuals of under forty, while toxic occur in those of forty or over. We know of no absolute evidence which indicates that there is any difference in the two, and we shall consider both under one head. Exophthalmic goiter occurs not infrequently in young children. Here is a picture of a child three and one-half years old with a typical exophthalmic goiter. Here we have the typical eye stare and a high pulse rate. Eye signs are of relatively little importance in the diagnosis of toxic goiter, with the exception of one—fixation. When exophthalmos is present, it can be known to be exophthalmos by the presence of white sclera between the cornea and the lid edge. One typical feature of thyroids is the stare. They lose the rested appearance in their eyes. They have a certain wide stare which can be recognized regularly after one has seen it.

We have operated upon a number of children from three and one-half to five years of age with considerable hesitation. Two things are necessary in dealing with children: First, we do the operation in two stages. We take out half, and then in six weeks take out the other half. Second, we leave a considerable remnant of thyroid in order that they will not have myxedema, a very undesirable complication in a young child.

Here is a picture of a typical wild-eyed exophthalmic goiter patient with a typical marked degree of exophthalmos. This young lady required the constant service of a nurse to pull the lids forward. Notice that she has no goiter. I would like particularly to call attention to the fact that exophthalmos is a dangerous lesion. We have three times seen complete loss of both eyes from the extreme degree of exophthalmos which occurs in the exophthalmic goiter. In each case I believe the eyes could have been saved had the patient not delayed but submitted to an early removal—she would have been able to see today. Therefore, in any patient with exophthalmic goiter, one should consider the possibility of edema, ulceration of the cornea and infection and loss of both eyes. We have tried everything to prevent the loss of eyes. We have cut the external canthus, sutured the lids together, and resected the superior cervical sympathetic ganglion, but once marked edema of the cornea occurs, the pressure is so great the eye is lost.

Hyperthyroidism often persists as a mild disease. We have in this condition very reliable data in the form of the basal metabolism tests. Any patient with mild hyperthyroidism symptoms should not be submitted to one basal metabolism

test, but that patient should be put in the hospital under observation for repeated metabolism tests. Those patients who truly have hyperthyroidism will show persistently elevated basal rates which do not fall to normal. Now no patient, in my opinion, should be diagnosed as hyperthyroidism without a metabolic rate. These patients should be in the hospital at rest the night before examination, because if it is to have diagnostic value, it must be a true rate. If there is doubt, we do not depend upon one test, but repeat day after day for a week. Then, if the clinical symptoms agree with the metabolic findings, we will operate upon these cases as possible hyperthyroidism cases. One should be extremely careful of those patients who lack positive clinical evidences of hyperthyroidism.

There is a group of cases in which we have been very much interested—thyrocardiacs. I would like to stress to you the hopefulness of these seemingly hopeless cases. We have operated upon 138 patients with cardiac decompensation from mild and medium to severe. Forty-two of them had free fluid in the chest, were unable to lie down, and in the most extreme stages of cardiac decompensation. We have learned that these patients can take a general anesthetic and will regain their cardiac compensation within a week after removal of their thyroids, can lie down, and will be able to walk over the hospital within a few weeks. Therefore, I would stress that any patient who has hyperthyroidism and has cardiac decompensation becomes a very possible candidate for surgery and has a very good chance of fully regaining cardiac compensation to a degree of being able to earn his living.

Cardiac decompensation due to thyroidism is due to thyroidism being superimposed upon a heart which is already damaged or abnormal. As stated above, following the removal of the thyroidism, extraordinary return of cardiac capacity can occur after relief from thyroidism by subtotal thyroidectomy.

What is the effect of iodine on exophthalmic goiter? Here is an exophthalmic goiter with typical hyperplasia, very little colloid and high epithelium. In the same tissue, after the use of iodine for three weeks, there is an accumulation of colloid and a marked change in the gland. It is of value particularly in preparing the patient for surgery. One should take one position or another with regard to toxic goiter, and treat them with iodine or not treat them with iodine. If the patient is to be operated upon, send her to the surgeon to operate and let him administer iodine. Do not send the patient to him after you have saturated her with iodine. Iodine will produce a drop in metabolism and in pulse rate. This will be maintained over a period of about three weeks and during the next six weeks it will come back to the point where it was before the iodine was administered. If one

decides that the patient is not to be operated upon, or the patient refuses operation, iodine may then be given as long and as much as one desires, but it in itself does not cure hyperthyroidism. It benefits the patient only temporarily.

How do we treat these patients surgically, and how much should we take out? One should remove thyroid tissue in amount which corresponds to the type removed. In those patients with multiple colloid adenomatous goiter, the gland will be found to be riddled with semi-necrotic masses, and large amounts must be left. If, on the other hand, you operate upon a patient who has a gland which has not become involved and which is still relatively soft, that is one of extreme hyperplasia. Leave a considerable amount and you will have an incomplete cure. If, on the other hand, we operate upon a patient with marked involution, removing a very large amount and leave behind but a small segment which functions but poorly, you will have a very high percentage of myxedema, and so one must remove amounts of tissue based upon the type of gland with which one deals. One should make just as radical removal as possible with the type of thyroid dealt with.

Just as some communities are lax in their management of diabetic coma, so some communities are lax in their management of thyroid crises. Patients who have exophthalmic goiter or primary hyperthyroidism, and who show intensification of their symptoms quickly, such as marked changes in pulse rate in the way of elevation, marked increase in excitation, diarrhea, vomiting, or any changes in their mental state in the way of peculiar statements or senseless remarks, or anything which is a forerunner of an impending delirium, are in serious danger. These patients should be considered immediately as possible thyroid crises and started on emergency measures. We have stressed this condition repeatedly, and I desire to present it to every community in which I talk. If it is feasible to overcome diabetic coma by emergency measures before coma appears, so it is feasible in the same way to avoid the thyroid crises which become intractable when patients are permitted to reach the depths of crises. It is possible to avoid these crises by immediate emergency measures before the intense thyroidism which accompanies thyroid crisis appears. In these patients with impending crises, with the symptoms already stated suggesting their appearance, emergency measures should be undertaken immediately in the form of intravenous salt solution with at least fifty to seventy-five grams of glucose per day. Iodine in the form of Lugol's solution by mouth, by rectum, or in the salt solution. Morphia in large doses until the patients are controlled, or until the respirations reach dangerous levels. If these measures are undertaken as emergency measures early, a great many of these cases will be kept from going into crises and, therefore, deaths will be avoided frequently.

We had hoped that with the advent of iodine, patients who came to us in delirium and in crises could be gotten out with iodine. A good many can, but, on the other hand, a good many will die when seen in crises in spite of even heroic measures. They certainly will not stand surgery when in delirium and in crises, and a good many will not respond to these measures spoken of above. Therefore, it becomes the duty of anyone dealing with a case of hyperthyroidism which is becoming rapidly more intense immediately to undertake these emergency measures in order to prevent possible appearance of thyroid crises.

Regarding cures: We believe that the only test of cures of any method is a large group of cases upon whom metabolism has been done before operation, and upon whom metabolism has been done after operation and at the end of a year. We are reporting here a series of one thousand exophthalmic goiters with a metabolism previous to the operation averaging +49 and after operation an average of eight days, while still in the hospital, +20. Of this number a large percentage returned at the end of three months, a smaller percentage at the end of six, and a still smaller percentage at the end of nine. Three hundred and eighty returned at the end of twelve months. Their metabolism at the end of twelve months was +2, normal. They also had gained in weight twenty-two pounds. This is graphic evidence of the fact that subtotal thyroidectomy, properly performed, will relieve these patients of hyperthyroidism.

In the course of this examination of a thousand records, consecutively taken, we found 245 toxic adenomata records. Their metabolism previous to operation was +40. Of this number, eighty-two returned at the end of one year and they had a metabolism also of +2. This is further evidence that toxic adenomata, just as exophthalmic goiters, are relieved by subtotal thyroidectomy.

We believe that all methods which claim to relieve thyroidism should report their results in group totals of basal metabolism previous to operation and at the end of a year after operation, and that if this is done, this will end all controversy as to whether or not certain methods do accomplish or do not accomplish relief.

DISCUSSION

GOETHE LINK, M.D. (Indianapolis): Dr. Lahey's talk has left a delightful impression. It has been so complete and so well coordinated. It is unfortunate that a larger audience could not have heard him. Everyone at this session should have heard the talk, so full of truths.

What the essayist had to say about the use of iodine in goitre should be placed on billboards all over Indiana. The harmful use of iodine which has resulted from magazine articles might thus be corrected. I should like to take up all the points which he has covered and comment upon them—he has covered them in such an interesting

manner—but time does not permit. What he said about colloid goitre interests me because many physicians who bring in goitre cases, probably very toxic ones, have been looking for simple colloid goitre. A colloid goitre of non-toxic type is rare in this part of the country. However, I shall not argue the infrequency of non-surgical colloid goitre, since Dr. Lahey has found one reason after another to remove all of the goitre.

Malignancy from a clinical standpoint has not been quite as common in my experience as he has indicated. If there is anything that will encourage the patient to have a goitre removed, the fear of malignancy will do so.

It has been my firm opinion, and I constantly try to drive this point home, that all goitres sooner or later are toxic. It is impossible for a patient in a few weeks to become so badly damaged as some of these patients are. The fact is that we should do away with the term "simple goitre." We have children in Indiana with toxic goitres. I have one eight years old with severe exophthalmic goitre under my care at the present time.

Here I wish to speak of a type which I have found rather common in my experience. A mild, chronic thyroid disease which I refer to as fatigue type because fatigue is the patient's first and leading symptom. Their chief complaint is that they are tired all the time and that they can't do their work. Some of these, if followed for a long time, may develop into exophthalmic cases. They are incapacitated by a mild degree of hyperthyroidism. Put the patient in the hospital and keep her there twenty-four hours and the metabolic rate does not show any increase of consequence.

The cases in which the heart is badly damaged often recover beautifully after operation, and when we see them in a few months they look twenty years younger. It seems remarkable that the heart damaged so badly can recover so well. If we can restore one of these individuals to health, we have accomplished something worth while.

The amount of thyroid to be removed is a question often asked. The physician usually is interested in that particular point. This is the rule which I follow: If the patient's thyroid is very small and extremely diseased, I reason that what thyroid tissue I leave in that patient is diseased tissue. So that if I cut it down to the limit, and the patient has to take thyroid extract for a while afterwards, it is much better than to leave too much. Any gland of internal secretion will hypertrophy to a point necessary to meet the physiologic need of its secretion if it has a normal blood supply. Be very careful, therefore, to leave an artery, usually the inferior thyroid, so that it supplies the stump with blood sufficiently. Now, if you leave too large a piece the patient cannot get rid of that. Rather err on the side of taking out too much and leave a normal blood supply to the stump.

W. D. GATCH, M.D. (Indianapolis): I seldom have listened to a paper with which I agree so heartily. I believe that Dr. Lahey's clinic is doing as good a work on the thyroid as is being done anywhere today. It is a great privilege to have heard him talk to us on this subject. He is to be commended especially for his work in the somewhat hopeless field of cancer of the thyroid.

In regard to the intrathoracic goitre. In most of my patients this has been on the left side.

It is interesting to note that in Switzerland sudden death from hemorrhage into an adenoma of the thyroid is not a very uncommon occurrence.

I judge that Dr. Lahey does not believe in total thyroidectomy. Certain writers have advocated total thyroidectomy for exophthalmic goitre. This is too radical. It always has seemed to me that it subjects the patient to a very great danger from loss of the thyroid secretion, and from danger to the recurrent neuro and para thyroid bodies. It produces myxedema. But, the argument is that it does not make any difference if the patient does have myxedema, for she can take thyroid extract. But, the question is, can thyroid extract replace completely the thyroid secretion? I recently noticed an article that reported eight cases of goitre that developed exophthalmas after operation. In one of these cases there was danger of the patient losing his eyes completely. The etiology of the condition is probably not known. It may have been due to edema in the tissues behind the eyeball. This is a field which borders upon internal medicine and surgery. You must have well-coordinated team work on these patients and they must be prepared thoroughly before operation.

About thyroid crises, I have one other point to add to those made by Dr. Lahey. In addition to the treatment by glucose, iodine and morphine, it is always important to watch the patient's body temperature. The body temperature should be taken, per rectum, every hour, and hyperpyrexia controlled as in the treatment of heat stroke.

From the intensive study of the thyroid which is being carried out all over the world we are sure, sooner or later, to get an answer to the riddle of the thyroid, as we already have had to the riddle of pernicious anemia. When this comes, hyperthyroidism may be treated by non-operative methods. Meanwhile, for patients who actually have hyperthyroidism, the results of operation, as Dr. Lahey has shown, are perhaps as good as in any field of surgery.

DR. LAHEY (closing the discussion): I, personally, do not believe it is worth while to operate many of the malignant cases because they will not get well, and they are better treated by x-ray than by surgery. There is an extremely vast difference in many ways between the goiters in Switzerland as compared to many of our goiters here. There must be something different in type, and I believe that explains why there is an intangible difference that we do not understand in

many communities. Certainly there is no comparison between cretinism in Switzerland and cretinism here.

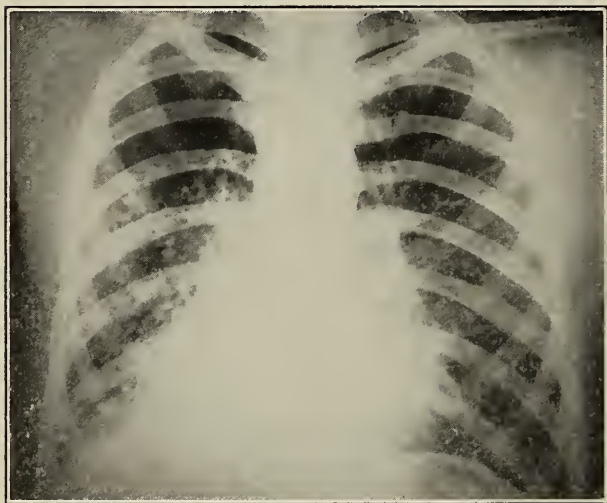
BRONCHOSCOPY IN LUNG SUPPURATION*

D. O. KEARBY, M.D.
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It is impossible to discuss all groups of lung suppuration in a case report and in the short time allotted. My remarks and case report will refer to stagnation in the endobronchial tree and lung abscess.

Dr. Chevalier Jackson says that bronchoscopy is indicated in the following conditions:

1. Bronchiectasis.
2. Acute abscess—post-tonsillectomic and post-anesthetic.
3. Atelectasis (so-called massive collapse).
4. Any form of bronchial obstruction.
5. Chronic pulmonary abscess.
6. Asthma.
7. Unexplained dyspnea.
8. Dyspnea not relieved by tracheotomy.
9. Unknown cause of paralysis of recurrent laryngeal nerve.
10. Obscure thoracic disease.
11. Unexplained hemoptysis.
12. Unexplained cough.
13. Unexplained expectoration of pus casts, mucus, etc.
14. For diagnosis of lung pathology not determined by sputum examination.
15. Pneumonography.



Primary film of chest.

Preliminary to the discussion let me emphasize that bronchoscopy *per se* is not a cure but another aid in the armamentarium of medicine toward assisting the patient to recovery. The patient must ever belong to and remain under the direct care

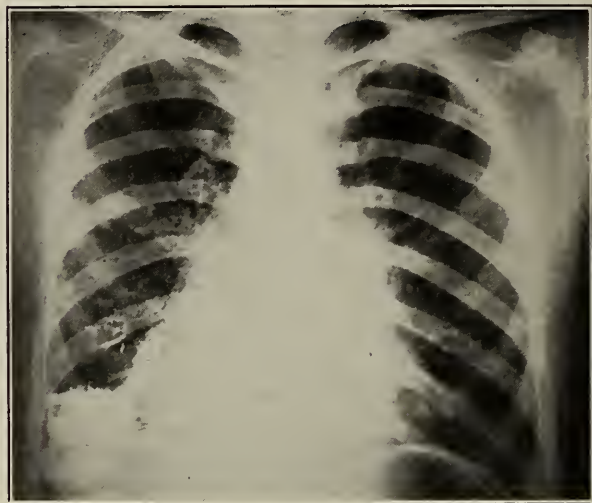
and supervision of the internist. However, a consultation of internist, roentgenologist, surgeon and bronchoscopist will arrive at a better plan of procedure to conserve the best interests of the patient than singly or otherwise.

Bronchoscopy offers assistance in the following:

1. Stagnation.

The natural physiological drainage of the lung is by cough and ciliary action. In infective processes of the lung that have gone on to sub-acute and chronic suppuration there is stagnation of pus and secretions in the affected portion of the lung.

After having a patient cough and cough until he can cough no more, use postural position and repeat forced coughing until no more sputum can be raised, we introduce a bronchoscope under local anesthesia, and when quantities of foul pus are



Anteroposterior view showing lipiodol introduced directly into abscess cavity with aspirating tube passed through bronchoscope.

aspirated we feel justified in saying there is stagnation. In addition to relieving the lung of foul pus by bronchoscopic aspiration, to observe the odor disappear, and have the patient recite his sense of well being and ask for a repetition of the procedure, one cannot help but feel that stagnation exists and bronchoscopic aspiration is justified.

2. Chronic Pulmonary Abscess.

The differentiation between tuberculous, non-tuberculous and mixed infections cannot be defined sharply in lung abscess cases.

Chevalier Jackson says that bronchoscopy offers the following three avenues of assistance:

(a) The endo-bronchial conditions in relation to drainage of the suppurative foci can be studied through the mouth without general anesthetic and is a minor procedure.

(b) Suppurative areas, large or small, can be emptied through the mouth in a few minutes, without general anesthesia, and this emptying done as often as necessary.

(c) By taking the load off drowned and fatigued cilia for a time, these and the other factors

*Presented before the Indiana Academy of Ophthalmology and Otolaryngology at the French Lick session, December, 1929.

in the spontaneous mechanism of drainage are enabled to recover, the efficiency of spontaneous drainage is re-established, and the defensive power of the lung restored. There are, in the cases usually classified as chronic pulmonary abscess, a group of cases in which a large portion of the lung is a mass of fibrous tissue with fistulæ leading off to various pockets. Bronchoscopic removal of granulations, pus, debris, and secretions by aspirators and suitable forceps clears the air way and permits aeration and drainage. Also by direct instillation of lipiodol, after the clearing process, makes pneumonography possible that otherwise would be impossible.

3. *Acute Pulmonary Abscess.*

A word only: In the development of an acute pulmonary abscess, there is, undoubtedly, a time when a temporary failure in the normal defensive power of the lung occurs, and infection gains a foothold—chills, temperature, cough, expectoration. If the above mentioned time of failure of defensive power could be determined, bronchoscopic aspiration should turn the tide to an arrest of symptoms and recovery.

In Jackson's clinics this observation has been made hundreds of times. He says: "The fact that in a patient getting progressively worse, the tide is turned promptly by the bronchoscopic aspiration, often by the very first aspiration, is very striking; and the additional fact that this has occurred hundreds of times, and in the hands of eight or nine different members of our personnel, eliminates the possibility of mere coincidence."

Case reports:

Case 1. R. W., age fifteen, male, white. Was admitted to James Whitcomb Riley Hospital on October 1, 1929. Family history: Mother living—well; father died of ruptured appendix. One brother and sister living and well. Three brothers and one sister died in infancy.

Complaint:

1. Cough—great amount expectoration.
2. Pain on taking deep breath.
3. Tickling sensation in throat.
4. Vomiting.
5. Can't sleep.
6. Fatigued.

History:

Influenza in January, 1929. Above symptoms—cough, expectoration, vomiting and pain since. Previous history up to January, 1929, negative.

Examination:

Head—negative, except fetid breath and enlarged tonsils.

Chest—Dullness in left chest. Few rales left side.

Heart—Negative.

Abdomen—Negative.

Extremities—Negative.

Impressions:

1. Bronchiectasis.
2. Lung abscess.

3. Unresolved pneumonia.

4. Bronchial fistulæ.

X-ray of chest October 2, 1929.

Summary of Case:

Sent to X-ray.

Influenza in January, with persistent cough, profuse yellow sputum, with offensive odor.

Diagnosis: Probable bronchiectasis, or lung abscess. Physical signs more noticeable on left side.

X-ray report: Parenchymatous changes in right lower half lung. Immediately to right of heart and above diaphragm, extending up to level of ninth rib, in mid-scapular line, is homogenous density which fuses with heart and lung shadows. Above this level up to mid-portion of lung fields are disseminated, mottled shadows which have typical appearance of T. B. infection. These appear to be exudative in character. An old primary



Film of chest with lipiodol introduced into tracheobronchial tree by the ordinary method.

T. B. focus is seen just above right diaphragm at inner margin of peripheral zone. Increase in trunk markings of left base but remainder lung appears fairly clear. Lung abscess cannot be excluded in right base.

October 14, 1929. Patient referred for bronchoscopy. Aspirated 300 cc. thick, foul pus from both right and left bronchi; more from right than left. No study made for location of infected bronchial orifice or lung abscess opening. Patient improved as to cough, etc.

October 21, 1929. Repeated bronchoscopy. Great amount pus aspirated from right lung. Orifice of right middle lobe bronchus swollen and inflamed. Aspirating middle lobe bronchus brought great quantity of pus. Left bronchus more free of secretion.

October 22, 1929. X-ray. Not much change except that pathology is shown rather definitely in right lung.

November 4, 1929. Bronchoscopy. Aspirated six ounces of pus from right lung. Instilled lipiodol into right main bronchus.

November 5, 1929. X-ray. Lung fields have cleared appreciably since last examination. Considerable bronchopneumonic changes still remain in the right lower two-thirds. Small amount of lipiodol shown. Greater amount must have been coughed up. Findings not so indicative of tuberculosis.

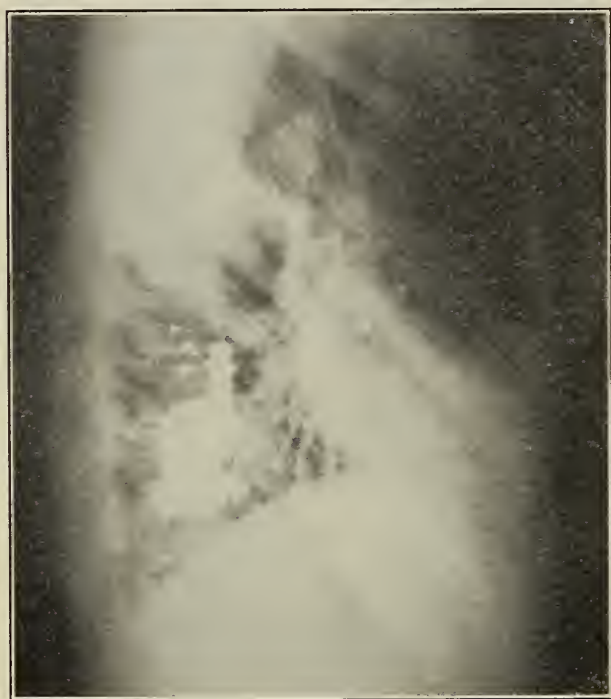
November 11, 1929. Bronchoscopy. Aspirated about four ounces of thin, greenish pus. Odor much less offensive. Patient feels better.

November 14, 1929. Bronchoscopy. Very much less pus recovered than at previous aspiration, three days ago. Odor less offensive.

November 21, 1929. Bronchoscopy. Pus is thinner; odor lessened. About four ounces recovered.

November 28, 1929. Bronchoscopy. Same as at previous aspiration, except pus was seen exuding from small terminal bronchial orifice, leading toward lateral wall, in the inferior lobe.

December 5, 1929. Bronchoscopy. Main stem bronchus and about orifice of the middle lobe bronchus was clearer. Same pus-exuding orifice



Lateral view of chest showing lipiodol filling cavity.

was seen. A velvet-tipped aspirator was introduced into a cavity filled with pus; about five ounces recovered. Lipiodol instilled.

December 10, 1929. Bronchoscopy. Aspirated about five ounces from large cavity. This cavity was not discovered at first aspirations, and probably will not yield to bronchoscopic aspiration. Surgical consultation will be advised.

NOTE: The patient was given morphine sulphate, one-fourth grain, one hour before bronchoscopy, for the first three aspirations. The following

five were without any anesthetic or pre-operative morphine.

The progress note made on October 15th, the first day after bronchoscopy and aspiration, is interesting: "Last night patient had first night's rest since illness began. Patient coughing up twenty-five to thirty cc. yellow pus each day. Patient is better." Each day's progress note shows improvement. Patient is able to clear over-loaded lung. Culture of pus was streptococcus viridans.

The films show how lipiodol for pneumonography, instilled directly into the cavity, is superior to the old method of injecting into the trachea.

THE TREATMENT OF SCIRRHOUS AND OBSTRUCTIVE LESIONS OF THE STOMACH AND DUODENUM*

E. S. JONES, M.D.

HAMMOND

The treatment of scirrhus and obstructive lesions of the stomach and duodenum has been quite varied. This, in itself, is proof that no one method has been entirely satisfactory. Some time our medical confreres may be able to determine the etiology of peptic ulcer and by prophylaxis or adequate treatment prevent scarring, perforation, or obstruction. However, since this treatment is not always successful, surgical intervention is sometimes necessary. In the not distant future I believe a satisfactory method of pyloroplasty will be devised which will be applicable to most gastric and duodenal lesions, in which case the pathology will be removed and normal physiology restored. To date, however, none is satisfactory in any large percentage of cases, except the Ramstedt for hypertrophic stenosis of the pylorus. The Horsley or Finney pyloroplasty also is most satisfactory in selected cases, and in the hands of an expert operator.

Gastro-enterostomy probably is used more in these lesions than any other method. It has relieved many patients and has a definite place in surgery, especially in pyloric obstruction from healed ulcers, or from extrinsic origin. There are many who believe it to be the operation of choice in duodenal ulcers. Ochsner, however, said, "It is mechanically and physiologically unsound."

If there is complete occlusion of the pylorus, gastro-enterostomy gives very satisfactory results. If obstruction is not complete, unsatisfactory results often ensue. Marginal ulcers occur in from five to thirty-seven percent of such cases, as shown by the reports of Lewisohn, Joyce, Mayo and others. This wide range may be due to difference in obtaining complete follow-up records.

With complete occlusion of the pylorus, gastro-enterostomy permits the acid gastric juice to be

*Presented before the Section on Surgery of the Indiana State Medical Association at the annual session held in Evansville, September, 1929.

neutralized readily by the alkaline jejunal content. The ostium is then bathed in an alkaline media. If, however, the pylorus is functioning so that the jejunal mixture becomes partially neutralized, the ostium of the gastro-enterostomy will not be bathed in a strong alkaline medium and an ulcer may form at the point of anastomosis. Let us remember that no pathology has been removed by gastro-enterostomy. The gastric or duodenal ulcer or their scars still remain, and there is some question if more pathology has not been formed.

Any operation which does not remove the pathological process, except in emergency cases, is not as sound as one in which the pathology is removed and as nearly as possible normal physiology re-established. In scirrhus and obstructive lesions of the upper alimentary tract it is quite often impossible to restore normal physiology. However, I believe the most rational and satisfactory method of treating such lesions is to remove the pathological process, and to restore a partially normal physiological state, by sub-total gastric resection. This causes the gastro-jejunal ostium to be bathed at all times with an alkaline mixture which rapidly reduces and neutralizes gastric acidity. Reports show that marginal ulcers are reduced to less than one percent by this method. Gastric resection eliminates the bleeding, perforating or painful ulcer, makes convalescence quite smooth, and, I believe, in most cases, reduces morbidity.

The technical difficulties from gastric resection are slightly more than of gastro-enterostomy; but certainly no one would recommend that gastro-enterostomy be attempted by an operator not capable of doing a gastric resection. A stereotyped technic for partial gastric resection is wrong. Some cases are done easily by bringing the jejunal loop posterior to the transverse colon. Others must be brought anterior. In rare instances is it necessary to do a jejuno-jejunostomy. This, however, should not be done except in rare instances because the alkalinizing effect at the gastro-jejunal junction is lost.

A simple but convenient procedure in technic is to push off the muscular coat, leaving a stump of duodenal mucous membrane, about one cm. long, which is ligated and inverted, and the muscularis and serosa sewed over in layers. This may then be covered with omentum. In most cases I prefer anastomosing the jejunum to the severed end of the stomach. I do not see any advantage in closing part of the gastric opening, except when the stomach is greatly dilated. I rarely do the Billroth I or II. It is more time consuming, and I believe the advantages are more academic than real. The jejunal loop must not be too short. However, I have not experienced any improvement in using the eighteen to twenty-four-inch loop.

In post-operative management, nothing is given by mouth for the first twenty-four to thirty-six

hours; water, one drachm, is given every hour for the next twelve hours; it is then increased to one-half ounce for the next twenty-four hours; one ounce is then permitted, alternating with milk and water for the next forty-eight hours. Other liquids may be taken by the end of the first week. One and one-half ounces may be given every one and one-half hours. Fruit juices, broth, milk, etc., are also well tolerated. Between the tenth and twelfth days the patient may have a soft diet, in not too large quantities, and at the end of the second week, the caloric intake should be normal, with two and one-half to four ounces taken at a time.

These cases frequently are dehydrated and are quite anemic. In some cases it may be advisable to give a blood transfusion before operation, and to continue this at intervals until the hemoglobin is seventy percent or better. I always give 1,000 cc. of normal saline or five percent glucose with one ounce of one percent novocain by hypodermoclysis every eight hours; this accompanied by a continuous proctoclysis of about thirty drops per minute. This is continued until the patient is able to take sufficient fluid by mouth. Gastric lavage is always done at least once before operation, and only if needed after. A sedative is given hypodermically as needed. It also is advisable to elevate the head on two pillows; this makes the patient more comfortable, besides probably relieving some tension on the esophagus. Hospitalization in my cases has averaged about sixteen days.

I wish to present a few case reports.

Case 1—B. C. Male, forty-five years, auto painter.

Admitted September 20, 1927. Four years ago began with pain in epigastrium. Three years ago tarry stool; attacks at intervals; food at first relieved pain; lost twenty-three pounds in the past year; pain almost constant. Marked scoliosis and kyphosis with great deformity. Point of tenderness just above umbilicus; no rigidity; reflexes normal.

September 21, 1927. Total acidity thirty; free HCl ten. No Oppler Boas or lactic acid bacilli; some yeast and pus cells. W. B. C. 7,200; R. B. C. 4,010,000. Hemoglobin forty-three percent. Wassermann negative. Four blood transfusions given before operation. X-ray diagnosis: Gastric ulcer, producing some constriction.

October 4, 1927. Partial gastrectomy, Monahan technic, removing about three-fourths of stomach. Blood transfusion on table, and one on October 6, 1927. Operation disclosed firm perigastric adhesions, liver over-hanging stomach, perforating gastric ulcer, adherent to under surface of the liver.

Pathological report: Chronic recurrent perforative gastric ulcer. Uneventful recovery. Discharged October 20, 1927. Works every day; does not adhere to diet, and gets drunk once a week. Has no gastric symptoms.

Case 2. M. H., female, age fifty-two. Admitted November 8, 1927. Began three years ago to have pain in epigastrium, one to two hours after meals. Relieved by vomiting; lost twenty-three pounds past three months; getting weak; feels better when stomach is empty; very tender and rigid over epigastrium.

X-ray diagnosis: Hour glass constriction. B. C. normal; hemoglobin eighty-five percent. Urine negative. Total acidity eighty-five percent; free HCl seventy-one percent; few epithelial, blood and pus cells. November 14, 1927. Partial gastrectomy Polya technic; perforating ulcers adherent to the under surface of the liver and pancreas; almost complete occlusion of the stomach; ulcer of duodenum. Pathology: Chronic ulcer ventriculi.

Uneventful recovery; discharged November 27, 1927. Perfectly well since.

Case 3. E. M., male. Admitted February 1, 1928. Father died at fifty-eight years, stomach trouble. Mother died at thirty-eight years; debility. Three years ago began with pain in stomach; pain after eating; relieved after vomiting; loss of weight; headache and backache; tarry stool.

X-ray: Ulcer of obstructive type at pylorus.

Examination: Small linear mass just to right of midline and two and one-half cm. above umbilicus, two and one-half cm. in length; firm and tender.

Gastric analysis: Total acidity forty; free HCl 10; B. C. essentially normal; hemoglobin eighty percent.

February 4, 1928, one-third of stomach and three and one-half cm. of duodenum resected; Monahan, Polya technic.

Pathology: Ulcer involving pylorus; uneventful recovery; works every day; no symptoms.

Case IV. G. T., forty-nine years. Admitted January 29, 1926. Began four years ago to have pain in epigastrium; relieved by food; later food relieved him about one hour, then pain until vomiting; was operated four years ago for "dropped stomach"; no improvement; has lost a great deal of weight; seems to vomit as much as he eats; never any blood.

X-ray: Very large stomach; obstruction at pylorus.

Total acidity sixty-two percent; free HCl forty-eight percent. B. C. and urine negative.

January 31, 1926: Posterior gastro-enterotomy and cholecystectomy; large ulcer at pylorus producing obstruction; gall bladder full of stones; many adhesions; stomach enormously dilated. Uneventful recovery; no symptoms.

Case V. Mrs. C. R., fifty-seven years. Admitted May 3, 1929. First noticed weakness and eructating gas December, 1928. One month later nauseated with non-productive vomiting. Has lost great deal of weight. Past month appetite poor, but no discomfort after eating. Past three weeks very tender in epigastrium, the bed clothes even

hurt her. No carcinoma history in family. A palpable mass just to right of midline and below costal margin; movable, tender and about two cm. by four cm.

X-ray report: Carcinoma of the stomach.

Free HCl negative; total acidity 8; trace albumin. R. B. C. 4,100,000. Hg. sixty-five percent; W. B. C. 10,500.

Operation May 4, 1929. Large hard mass size small grape fruit on greater curvature, involving pylorus, and extending to lesser curvature, almost occluding gastric lumen. There is one gland immediately adjacent to mass. No other evidence of metastasis. Sub-total gastrectomy.

Pathological report: Medullary carcinoma.

Uneventful recovery. Discharged May 25, 1929.

Case VI. E. K., male; aged forty-four years. Admitted July 15, 1929. Always had stomach trouble. Last February vomited blood. Past year had discomfort in epigastrium after eating. At times food or soda would give relief. Past three or four weeks food causes pain; vomits some; losing weight rapidly. At present there is a large hard mass about the size of an orange just above and to right of umbilicus.

X-ray report: Post pyloric ulcer with almost complete obstruction.

Hemo. seventy percent. R. B. C. 4,250,000. Total acidity seventy-six percent; free HCl fifty-eight percent.

July 17, 1929. Sub-total gastric resection. Large ulcer on posterior wall of duodenum, involving pylorus. Very firm adhesions to head of pancreas.

Pathological report: Multiple chronic ulcers of stomach, superficial and deep, with infiltration.

Discharged August 4, 1929. Uneventful recovery.

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DISCUSSION

J. K. BERMAN, M.D. (Indianapolis): It is an old slogan that, "The proof of the pudding is in the eating thereof." Dr. Jones has obtained beautiful results with his method of procedure and I, therefore, congratulate him most heartily. However, there are a few points on which Dr. Jones and I disagree.

First of all gastric and duodenal lesions are different, and, therefore, should be treated differently. I say that they are different lesions because of the following principal proofs:

1. They occur in different types of individuals. The duodenal ulcer occurs in the long-chested, lean individual as a rule, whereas the gastric ulcer occurs in the heavy "gall-bladder" type of patient.

2. The symptoms are different. I need not go into a discussion of these differences here.

3. Behavior as to hemorrhage and perforation is different. Hemorrhage is more common in gastric ulcer, whereas perforation is more apt to occur in duodenal ulcer.

4. The chemical nature of the stomach contents is different. There is a much higher acidity in the gastric ulcer as a rule.

5. There is a very much more marked tendency toward malignancy in gastric ulcer, whereas in duodenal ulcer there is rarely any malignant degeneration.

Because of these points we must treat the two lesions in a different manner.

First let us discuss the treatment of the scirrhus type of duodenal lesions.

1. If we have a healed ulcer, and the outlet of the stomach is narrowed or occluded, then we do a gastro-enterostomy alone.

2. If we have an active ulcer we excise the ulcer or remove it by the cautery, and then do either a gastro-enterostomy or a pyloroplasty (as the Finney type if the stomach is freely movable, or the Judd type, in which the anterior two-thirds of the pylorus is removed).

In treating scirrhus lesions of the stomach the same conservatism is shown, however with the thought in mind that the lesion is apt to become malignant; we, therefore, always excise the ulcer. Before operating upon the stomach which has been obstructed for some period of time we must wash it carefully before operation and not allow the patient to have any food by mouth, so that we may put the stomach at rest and allow its stretched muscle to regain its tone. Sometimes it is desirable to do the operation of jejunostomy before any operative procedure is done upon the stomach itself.

Now, why do I recommend excision of the ulcer with a gastro-enterostomy in preference to the operation of gastrectomy such as Dr. Jones is recommending? Because—

1. Gastro-enterostomy is easier for the average surgeon to perform.

2. The mortality of gastro-enterostomy is much less than that of gastrectomy.

3. The acidity of the stomach remains the same no matter which type of operation is done, because the acid-bearing portion of the stomach (fundus) is not removed.

4. Gastro-jejunal ulcers are not as common after gastrectomy but are harder to deal with when they do occur.

I have tried to analyze in my own mind the reasons for some of the present antipathy towards the old operation of gastro-enterostomy. Some of

the reasons for its undeserved disrepute are as follows:

1. Because the operation is done unnecessarily.

2. Because no preliminary preparation is made.

3. Because there has been insufficient post-operative care.

4. Because other diseased organs such as the appendix or gall-bladder have been overlooked.

5. Because frequently an ulcer on the posterior side of the stomach is overlooked.

6. Because the patient does not adhere to strict diet following his operation.

If these facts were carried out the results from gastro-enterostomy would be very much better than they are in general today. We must not forget that gastro-enterostomy is an old operation, and that the worst of it is already known, and certainly we cannot improve on some of its results in our selected cases, whereas the operation of gastrectomy is fraught with dangers both immediate and distant, and we should, therefore, be careful in the selection of cases for the removal of the lower portions of the stomach.

In hour-glass constriction of the stomach resection of the ulcer and plastic repair or resection of the ulcer with gastro-enterostomy is the procedure that I usually carry out. Occasionally I perform gastro-gastrostomy.

In large ulcers of the stomach or recurrent ulcers of malignant ones the operation of gastrectomy must be done because of the liability of cancer in the former and the danger of metastasis in the latter.

Summary: In the treatment of scirrhus lesions of the stomach and duodenum we should use the simplest measures wherever possible, that are consistent with the patient's present and future safety. In the present state of our knowledge concerning ulcers of the stomach and duodenum, marked conservatism should govern our treatment.

E. E. PADGETT, M.D. (Indianapolis): Dr. Jones referred to the use of drugs in the treatment of ulcer and then passed on to the type of scirrhus changes. I believe that we should give trial by medicine before surgery. When he goes into the field of gastro-enterostomy he makes a broad step but a step we are going to make more and more. We have seen gastro-enterostomy with good, bad and indifferent results.

Some cases are best treated by gastro-enterostomy, especially if there is no malignancy and if the obstruction is complete. Inoperable carcinoma with obstruction can be treated best by gastro-enterostomy. Partial resection entails a little more time and a little more shock.

As to technique, I believe that end-to-end anastomosis is best. I think these are the reasons: There is only one wound to heal, and another point is that I have tried not to use clamps. For the past two years I have not used any stomach clamps. I tie gauze around it and, having washed the stomach out before, then use two catgut su-

tures, one in the lesser curvature and one in the greater curvature. Thus you have not crushed it with a clamp.

I do not think I have anything to add to what he said unless it is this, there is always a possibility of stomach symptoms improving even after operation as time goes on. The stomach, like the gall bladder, has the power of readjusting itself to the new shape you have given it, and will improve in function as time goes on.

FRANK H. LAHEY, M.D. (Boston, Massachusetts): First of all, I think a small percentage have decided on resection. I would like to rule out malignancy. I would choose the type opposite to Dr. Jones; I would choose gastrectomy.

We have had seven hundred duodenal ulcers for observation. We have had these cases come into the hospital and stay in the hospital once every two months in order that we may know what the ulcer is doing. I do not believe that twenty-five percent of ulcers we see are operative. We have gotten all our results together, and they are the same. He said that every ulcer should approach surgery. I believe that it is good to put the patient to bed for three weeks. It is not good to give a diet and send them home. They must be educated in the treatment of ulcers just as diabetics are educated. They must be watched regularly and carefully. Put them to bed and take repeated pictures, and as long as the ulcer diminishes it will not be malignant. When it will not diminish in size then you should resect it.

I believe this trial with x-ray and the effect of medical management upon the ulcer or lesion is certainly essential. Therefore, I would stress that both duodenal and gastric ulcers be given better medical treatment. If I thought I had appendicitis or gall bladder trouble, and he took out my appendix or gall bladder I would not care, but I have a great respect for the lower half of my stomach and do not want it removed.

DR. JONES (closing the discussion): I wish to thank Dr. Lahey for discussing my paper. First, regarding Dr. Lahey's discussion about medical treatment. I am convinced that the proper treatment for all gastric and duodenal ulcers is first medically, and if that fails we must do something else. I think a large majority of them will be cured under medical management. Those not cured by medical treatment should be resected. First of all it may be necessary to find out what causes gastric ulcers. I have not read of any definite cause.

As to the end results of gastrectomy compared to gastro-enterostomy, I am sure that gastrectomy is now favored. I disagree with the high percentage of carcinoma developing in the gastric ulcers.

In regard to partial gastrectomy—it is true following a partial gastrectomy you do not remove the acid-bearing portion of the stomach, but the acid comes in contact with an undiluted alkaline mixture. Partial gastrectomy removes diseased

tissue and more nearly re-establishes normal physiology.

SURGERY IN THE HOME

J. T. FREELAND, M.D.

BEDFORD

(EXPLANATORY NOTE:—The following posthumous article is submitted for two reasons: It will depict the obstacles under which the operation was done, thus convincing the young surgeon that it is necessary to have courage of your convictions plus the courage to act upon them; second, a human life was saved. The author, the late John T. Freeland, read this paper before the Lawrence County Medical Society, at the last meeting he attended.)

I recently was called to Yellowstone, a territory about where Brown, Monroe, and Lawrence counties corner. It is certainly a wild rake country. The only tillable land lies in the narrow valley between gigantic hills. The road which we had to use to reach the patient's home, after leaving the county pike, was for the most part the winding creek bed with gravel of all sizes and shapes; an occasional pot hole of water as blue as the sky above and of uncertain depth. The steep hills are heavily wooded to their very summits; it seemed as though the sun could penetrate their dense foliage in only a few isolated spots. Occasionally the valley would spread out sufficiently to allow the development of a small-sized farm. Here one could see a small log cabin, log stable, a little garden enclosed with a hand-hewn picket fence, and the familiar old winding, rambling stake and rider rail fence marking the land owner's farm. The beautiful frost-painted foliage greeted the eye with a riot of coloring as the panorama unfolded before us while we climbed the hills through this typical scene of pioneer days in this good old Hoosier state.

Located at the head of a valley, surrounded by these precipitous hills on three sides, we found the two-room log home. This home site commanded an unobstructed view of the forty-acre farm. Just behind the house, a few feet away, stood the one room used as both kitchen and dining room. Their drinking water was obtained from a spring gushing clear, cold water from between the rocks at the foot of the hill behind the house. When we reached the front yard we noticed three decrepit Ford cars parked there, and a like number of horse-drawn vehicles. These old implements of transportation must have been taxed to their full capacity, judging by the crowd of neighbors and relatives assembled. Their facial expression gave one a hint how seriously sick the patient must be; their low muttering conversation added tenseness to the atmosphere. The family physician who accompanied me greeted these people, and so did I, and without further delay we entered the home. I saw a seriously ill young man lying on his bed. His eyes had a peculiar stare, they followed every move one would make. His respirations were limited to the chest entirely, and were rather shallow. This made me suspect peritonitis, because a man ordinarily breathes with the entire abdomen. He was pale, cold, and sweating. The temperature

registered 100 degrees Fahrenheit. The pulse rate was 120 per minute. I put my hand on his abdomen and it was as rigid as a board, very tender, and with great pain over McBurney's point. When I completed my examination, I told him he was suffering with appendicitis, that the appendix probably had ruptured, and that an immediate surgical operation was necessary. I was answered by an old man whose face was almost entirely hidden by a bountiful growth of grey, flowing beard: "That no operation was needed—I've had several spells like this, and I always cured my belly by rubbing it with absorbine junior—it only takes a few hours to get relief." Next an old lady spoke up and remarked: "God can cure him, and I am going to pray for him." Immediately she plunked down on her knees and began pouring forth supplications to the Almighty. It was a loud shouting, incoherent prayer and sermon combined. It lasted fully fifteen minutes. The ceremony was punctuated at frequent intervals by gracious shouts from the other sisters present. Practically everyone in the room was in tears when she finished. Finally, order was again restored and I explained to them that the young man had an abscess and rotten appendix in his abdomen; that the only thing left to be done was to remove it immediately or the lad would surely die. The patient spoke up and announced he "wan't agoing to be cut on." I replied, "Well, if that is what you think about it I will go back home, but you will surely die." His next remark was, "Will you insure me to get well?" "No," I said, "but it is your best chance, and in all probability you will be all right following the surgery. There is only one way to treat pus, and that is to let it out through an incision." Without further comment I picked up my hat and started out of the room. I was followed quickly by the father of the patient. Outside the house we talked the situation over, and the father returned to the sick room. Here they discussed the question further in the presence of the boy. When their common sense (of which they had a goodly fund) prevailed, they reached a sensible conclusion and directed me to proceed with the ordeal. The bewhiskered old gentleman spoke up and said, "Doc, I have heard that doctors sometimes make a cut on a fellow's belly and sew it up, leave a scar, and pretend that they have operateed and charge a fee for such things. Now I want to watch this here operation all the way through." I assured him that he would be welcome to stand by and see this one.

When I was called in consultation on this case I naturally assumed that we could send the ambulance and bring the patient to the hospital, but you will recall the roads and general inaccessibility of the home, and five miles was too far to transport this man on the shoulders of his friends and relatives. I returned to Bedford, for the instruments and other necessities. However, I left

instruction to the women folk to scour and scrub their largest dish pans, to fill them with water and keep a good fire under them until I returned. I present here the technique in detail because it is the same as used when surgery in Indiana was in a pioneer stage. I found that my instructions had been executed well during my short absence in town. The water was boiling, so I put the instruments, gloves and towels into the boiling water. The dining-room table had been placed in the bedroom, with the blankets and two quilts placed on top of it for the comfort of the patient. Sterile sheets had been borrowed from the local hospital. The abdomen was scrubbed, dried, painted with iodine, then washed off with alcohol. Sterile sheets were placed over the patient, and then the laparotomy sheet was next placed. I draped a sheet around the old man, and placed him where I wanted him to stand. I used a sterile sheet for myself. Here we were halted until the old lady who first prayed offered a prayer for the surgeon; it was a beautiful prayer, well worded and spoken in a calmer tone. She closed with the following words: "God give the surgeon a steady hand, clear vision, and good wisdom in this ordeal, and if it be Thy will restore this young husband to his wife and dear child." A further delay followed just as the patient reached the exciting stage of the anesthetic, when the patient groaned and mumbled a few words, a little dog growled and grabbed the anesthetist by the calf of the leg and sunk his teeth through the cloth. A quick kick dislodged the dog's hold and he landed against the wall with a yelp. In rushed the little boy who owned it and said, "You can't hurt my dog and I can lick the fellow who hit him." Both were put out of the room and left for the woods to console each other.

I now started the incision and the old man cleared his throat and said, "Whew! Doc, the air is a little close in here," and he began to edge away. I continued the operation, and when I reached the peritoneum it was protruded into the incision and was distended. "Come back here," I said to the old fellow, "I want you to see this." He moved over closer, so I made an incision through the peritoneum, and the foul, stinking pus gushed out over the field of operation. Mr. Whiskers reeled and staggered for the outside door. The little boy rushed in and yelled, "Say, Mr. Jones has dropped dead right here at the front door." I continued my operation, as I felt that my temporary assistant would recover. In a few minutes I heard him retching and vomiting as he lunged against the fence. The boy said, "Mr. Jones has come to and walked away." I found the gangrenous appendix, with its hole in it, removed it, tied off the stump, put in the soft rubber tissue drains and closed the wound. Dressings were applied and the patient was returned to his bed.

When we were ready to leave for home I was

astounded at the crowd of people mobilized in the front yard. I saw at a glance that it was a friendly gathering of neighbors, friends, and relatives, some of whom had traveled many miles. They had come to offer their services. These people in the isolated sections of the country are as dear to each other as blood relations, and they will make heroic sacrifices and divide their last crusts with each other if necessary. It has not been my desire that you interpret these remarks of mine as casting ridicule upon these good people, far from it. You who live in cities and do not even know your next-door neighbor should visit a community like this one and there learn what brotherly love really means. They will sit up night after night, for weeks at a time, with the sick neighbors and never utter a word of complaint. They are industrious, thrifty and truthful people. Back to the old gentleman with the whiskers, he called me to one side and asked, "How much is your bill, Doc?" I answered, "\$150." He said, "Wait here a minute." He returned in a short time with a cloth sack that had once held ten pounds of cane sugar. He stuck his hand into the bag, fumbled about the bottom a little while, and finally drew forth a huge roll of bills. I was surprised at his speed in counting off the amount of my bill, as well as at his readiness to pay cash. After paying me he turned to the family physician and said, "Now, Doc—when the boy gets well you will get your pay."

There was a time not very remote when all major surgical operations were performed in the patients' homes, even in the larger cities. Then, too, there were those living near by a city who were too ill to be removed to the hospital. Then there is another factor which entered into the surgery in the home: "We had no improved highways or rapid transportation as we do today. Almost all of the older surgeons and physicians were graduated after two short terms, without clinical teaching. A few physicians practically educated themselves by conscientious study and close observation. The courageous ones, with considerable daring, began performing minor operations, and stimulated by their success they developed a fair amount of skill and gradually extended their endeavors to the field of major surgery. From these *pioneers* came some of our leading surgeons of the world. A surgeon in those days who would do a laparotomy without even first seeing one performed, I think, deserves as much credit as a Bobbs or McDowell. There were many such surgeons in Indiana thirty or forty years ago. They were good students and retained what they read and could apply the theory. They operated without the aid of trained nurses, modern hospitals and laboratory facilities. In fact, about the only instrument of precision was a wooden stethoscope. They performed these daring feats within the patients' homes and practically nursed their patients through to convalescence. Many of these self-made surgeons gravitated to the larger cities and

there became famous. These pioneers boiled their instruments and operating sheets on the kitchen stove, and occasionally they had to use the wash boiler in the back yard. The dining-room table has served as operating table many, many times. Among the operations so performed in Lawrence County, Indiana, in the early days were: Ovariectomy, appendectomy, hysterectomy, intestinal obstruction, cholecystotomy, strangulated hernia, and many tracheotomies for relief of diphtheria. One esophagoscopy to remove a foreign body. One resection of knee joint. Strange as it may seem to you of the younger men of the society, our results compare very favorably with those of today done under more favorable circumstances. But my, how conditions have changed since I entered the practice of the profession! The advent of rapid transportation, by air, rail, and water, last but not least, the high-powered automobiles and the splendid, hard-surfaced highways, have almost effaced state boundaries, to say nothing of the smaller boundaries. Almost every county seat has a modern hospital manned by competent surgeons and physicians.

SPECIAL ARTICLE

INDIANA UNIVERSITY SCHOOL OF MEDICINE

(Seminar January 17, 1930)

SURGICAL CASE

JOSEPH CLEVINGER, M.D.

This patient entered the hospital with the following history: White, female, age thirty-four years, waitress, married.

Present Trouble—Immediate Complaint:

1. Pain in the right upper abdomen.
2. Nausea with occasional vomiting.
3. Jaundice.
4. Incontinence of urine.
5. Constipation.
6. Soreness in the right upper abdomen.

Story of the Trouble: Ten years ago the patient began to have intermittent attacks of pain in the upper abdomen, associated with slight nausea and occasional vomiting. These were rather mild, lasting from a few hours to a day, and were in no way associated with the taking of food, and were not relieved by food. She did not feel it necessary to call a physician. These attacks gradually increased in frequency and severity until six years later when the patient aborted a two-month fetus and was confined to bed. While yet in bed she had a very severe attack of pain associated with jaundice, which together with the results of the abortion caused her to remain in bed for a period of eight weeks. At this time she noticed some difficulty in controlling the urine. During the past three years the attacks have increased greatly in severity and frequency and hypodermics only give relief from pain. Jaundice fre-

quently follows the attacks. The last attack occurred December 28th and since then there has been more or less jaundice and soreness in the right upper abdomen.

The pain is stabbing in character, usually preceded by slight discomfort, and radiates to the right shoulder or shoulder blade. There is no periodicity and relief during the peak of the attack is obtained only by the use of morphine. The pain is located near the right costal margin at about the level of the ninth rib. Nausea and vomiting may or may not accompany the pain. Coarse vegetables and fatty foods seem to cause some digestive disturbance.

Jaundice when present follows the attack in from twenty-four to forty-eight hours.

Past Illnesses: Mumps, measles, pertussis and chorea at six years of age with apparently good recovery. No severe illnesses or operative procedures. Menses normal in every way. Has had ten pregnancies with five abortions and five living children.

Family History: Mother and one sister died of cancer, although this information in regard to the mother is rather indefinite.

Physical Examination: Physical examination shows a rather obese white female approximately thirty-five years of age who is definitely jaundiced but does not appear to be very ill. She is intelligent, answers questions readily and exactly without evident exaggeration.

The positive findings only are mentioned.

The sclera are deeply jaundiced as is also the skin. The pupils react to light and accommodation. There is some infection present in the tonsils and the teeth show signs of caries.

The thyroid is barely palpable.

The lungs are apparently normal.

There is very slight enlargement of the heart to the left and a slight exaggeration of both first and second sounds at the base.

The blood pressure is 178/80 mm. Hg.

The abdomen is slightly pendulous in type, showing many striæ. There is an area of tenderness in the right upper quadrant near the costal margin with no definite rigidity. Liver dullness ends at the costal margin.

The patellar reflexes are present and approximately normal.

Laboratory Findings: Laboratory findings are as follows: The urine is deeply bile stained and contains a few pus and red blood cells. Kidney function is forty-five percent in two hours, although this cannot be definitely determined because of the great amount of bile in the urine. R. B. C. 4,490,000; Hgb. 85 percent; W. B. C. 7,600; 70 percent polynuclear. Clotting time, three minutes; bleeding time, four minutes. Blood and spinal fluid Wassermann are both negative. The direct Vanden Bergh test is positive and the indirect shows forty-six mgs. of bilirubin per liter of serum (twenty mgs. is normal). The gall-blad-

der failed to visualize during many of the examinations after the dye was given. No evidence of calculi was found. A primary film of the abdomen shows a spinabifida occulta of the first sacral segment.

The patient was cystoscoped, but no pathology other than a slight hyperemia was found. Pyelograms made indicated no pathology which could be associated with the spinabifida occulta.

We present this case with a tentative diagnosis of cholelithiasis or gall-stones. It is presented as a case with a typical history with the physique usually associated with this pathology and with positive laboratory findings. A history of intermittent attacks of gastro-intestinal disturbance associated with some selectivity of food, gradually increasing in severity and lately associated with jaundice points to the liver and bile ducts at once. The fact that the attacks of pain have been so severe as to require morphine for relief leads us to believe that there is a stone present. The laboratory findings of bile in the urine and in the blood together with stools which contain very little bile makes us believe that the jaundice present is primarily due to obstruction of the common duct. Were this obstruction due to malignancy there probably would have been no pain and the jaundice would be steadily progressive instead of showing remissions. We were unable to palpate the gall-bladder, but the point of tenderness is located directly over the region where we usually expect to find it.

Frequently patients who show this amount of jaundice and this amount of bilirubin present in the blood will have a rather slow bleeding and clotting time. This patient's is approximately normal. However, in preparation for operation, we administer calcium both orally and intravenously for a period of five to ten days before surgery is attempted. If any bleeding follows operation, blood transfusion is resorted to, at the earliest possible moment. A gas-ether mixture is used for anesthesia in preference to ether alone, if relaxation can be obtained with this mixture.

Too much care cannot be exercised in the preparation of these patients for operative measures and the operative procedure is by no means an easy undertaking. We wish to show on the patient the point of maximum tenderness and the direction of radiation. It is not often that we have a patient who gives such a typical history and whose laboratory findings are so positive.

OBSTETRICAL CASE

EARL WISEMAN, M.D.

This woman, twenty years old, came to the Coleman Hospital on December 20, 1929, complaining of soreness in the lower abdomen, and pain in the lower abdomen and lumbar region. About one year before admission this small tumor in the lower abdomen was first noticed which has

grown steadily until the time of admission. About three months before admission she began to have discomfort, which increased until her entrance to the hospital. During the last three months she has lost ten pounds in weight, and during the last three or four weeks she has had pressure symptoms in the bladder and a frequent desire to urinate.

In the past her general health has been good. She had the usual childhood diseases, with very good recovery. When sixteen years old she was in an automobile accident and was in bed about a week recovering from lacerations and bruises. When nineteen years old she contracted a Nisserian infection and for about six months was under treatment for this. This part of the history was elicited by a medical student, but was overlooked by everybody else until after operation.

Her menstrual history has been regular. It began at fifteen years of age and has been of the twenty-eight-day type, lasting three or four days. She married at seventeen and has had no pregnancies and no miscarriages.

Family history negative, except the death of her maternal grandmother from cancer.

Physical examination shows a well-developed, poorly nourished female; temperature, 100° ; pulse, 98; respirations, 20. Pupils react equally; ear, nose and throat, negative; heart and lungs, negative; blood pressure, 125/90.

Abdominal examination showed a midline tumor over the symphysis pubis, about the height of a six-month pregnancy, which was quite firm and slightly tender. Vaginal examination showed a scanty, white discharge, a cervix quite firm and immovable, and a uterus which could not be distinguished from this mass in the abdomen. A slight endocervicitis also was present.

Laboratory examination showed a red blood count of 3,700,000; white blood count, 15,400. Urinalysis showed specific gravity of 1,020, a trace of albumen, and five or six pus cells in each type power field. The Wassermann, and the complement fixation tests for tuberculosis and Nisserian infection were negative.

The first staff consultant who saw her, in view of the rapid growth of the tumor and the state of the cervix, thought malignancy possible and advised x-ray irradiation. The gynecological consultant from the physical findings diagnosed uterine fibroid. He believed pregnancy was ruled out by the regular menstrual periods and by the size of the tumor. He also suggested that it might be an infected uterine fibroid. The obstetrician believed that pregnancy could be ruled out.

During the first five days in the hospital her temperature ran from 100° to 101.6° , but with rest and forced feeding this came down to normal and remained so for some time.

On January 3rd at operation a large mass was exposed which appeared to be the uterus. It seemed to be soft; and there was at first some fear

that there might be a pregnancy. Closer examination revealed a number of adhesions which suggested that it might be an infected uterine fibroid, but when a tenaculum was applied greenish pus came from the mass and aspiration of two quarts of pus revealed a tubo-ovarian abscess of unusual size. The right ovary was cystic and the right tube inflamed. This abscess had burrowed between the layers of the broad ligament and had involved the left ureter and ileac vessels. The right ovary, the uterus, and most of the abscess wall were removed; the portion left was packed with iodoform gauze, with the idea that it would slough out.

Her postoperative course has been uneventful. There has been considerable drainage, which is decreasing at present, leaving a small sinus which seems to be granulating from below.

This case is presented as an example of tubo-ovarian abscess of unusual size that simulated closely a uterine fibroid. We feel that closer study of the laboratory findings and observation of the temperature, with closer attention to the history-taking by a serious medical student, might have obviated the mistake in diagnosis, although it would not have affected the treatment.

ORTHOPEDIC CASE

ARTHUR HUNT, M.D.

The patient is a white female infant, three years old, admitted to the Riley Hospital January 6, 1930, because of dyspnoea and swelling of the abdomen. The duration of the swelling is about two months, and has become gradually worse since its onset, the dyspnoea apparently increasing with the swelling. The child has been irritable and fussy most of the time, but except for the swelling, we see nothing else wrong with it. The feeding of the infant since it was four days old, when its mother died, and until she was fourteen months old, has been only dextro-maltose and a formula containing cow's milk. At no time until fourteen months of age was she given cod liver oil or accessory feedings, when a soft diet, composed of boiled vegetables chiefly, was allowed.

Family history: Father living and well; mother died as a result of the Cesarean operation performed when this infant was born; she has no brothers or sisters. No history of tuberculosis in the family or of exposure could be elicited on two attempts. There is no familial tendency of which we could find a record, to neoplastic disease, leukemia, or Hodgkins' disease.

Physical examination: The head was negative except for dental caries. The neck was negative. The chest showed a very slight rosary, and the lungs on physical examination, rales at both bases. The heart was negative. The abdomen was of special interest because it was distended markedly and apparently tender on palpation; a fluid wave was elicited. This had been increasing during the

two months before admission to the hospital. The reflexes were normal. There was no glandular enlargement.

Laboratory findings: The urine was essentially negative in every respect—no albumen, no sugar, microscopically, and only an occasional pus cell found under low power. The blood: white count, 13,000; red count, 4,650,000; hemoglobin, 90 per cent; a differential showed polymorphonuclear finely granular cells, 35 percent; lymphocytes, 60 percent; mononuclears, 14 percent; eosinophiles, 1 per cent. The blood Wassermann was negative. Vaginal smears for gonococci were negative.

The Mantoux test the first day was severe, the dilution being 1 to 1000. X-ray films of the chest showed shadows distributed throughout the lower three-fourths of the right lung, also the hilum and middle zone. There is slight congestion of the left lung, but the mediastinum is not definitely involved. The general appearance is strongly suggestive of tuberculosis, although pyogenic infection, such as of the upper respiratory infection, cannot be ruled out.

A gastro-intestinal roentgenological examination was made to exclude obstruction, which showed in about two and a half hours a partial obstruction in the distal ileum. This is strongly suggestive of tuberculous peritonitis.

The temperature, on admission, was 100.5°, and shortly afterward 104°, has been normal or slightly below normal. The weight has remained practically the same. The stools have been normal and the bowels quite regular.

Treatment: To date this has consisted of a child's special high caloric diet and general measures for tuberculosis, such as rest in bed. In addition, the infant is receiving viosterol and ultra-violet ray treatment daily.

Diagnosis: Tuberculous peritonitis. In favor of this is the absence of cardiac and renal disease; also of signs of liver disease, such as jaundice, the fact that this distension is chronic and long continued, the marked skin reaction to the Mantoux test, and the pathology shown on physical examination and on x-ray films. On the other hand, we can find no family history of tuberculosis, and the white count is 13,000.

As to what to do next: we are now considering paracentesis to relieve the patient of some of the dyspnoea, and the inoculation of a guinea pig to confirm the diagnosis.

If this is tuberculous peritonitis, the chances are that there is tuberculosis elsewhere in the body. The incidence of tuberculous peritonitis in a series of 6,000 surgical cases is about .5 percent. In a series of 19,000 autopsies it was found in 3.5 percent of the cases, a rather high figure if of tuberculous peritonitis without other tuberculous lesions also. There are two main types of this condition, the so-called wet and dry, the wet being those with ascites, as in this patient we are presenting, and the other, the fibrous type with a fibrous exudate.

The diagnosis depends on the ascites, the most common cause of which, in children, is tuberculous peritonitis. Besides this there is usually fever, wasting, colicky symptoms, and irregularity of the bowels. Fever, which is not constant, is absent in this case. There are two other tuberculous foci in the body, and a positive skin test is of value in an infant.

The routine treatment for tuberculosis anywhere else in the body is advised for this form also, and, for children especially, the ultra-violet ray, and cod liver oil, or its equivalent. Paracentesis will be done to overcome the dyspnoea. Surgery may later be indicated if adhesions cause bowel obstruction, and has been used in selected cases of the ascitic type—a small section of the abdomen to let in the air.

Prognosis: Although a serious condition, the outlook is not entirely hopeless, especially for those with ascites, but it varies with age. Death usually results from miliary infection, from pulmonary lesions, or from tuberculous meningitis.

ORTHOPEDIC CASES

NORMAN BAKER, M.D.

We are presenting two cases representing two types of skin grafting.

The first case, Ivan, was burned on October 13, 1929, when he threw some gasoline in the stove and the stove exploded. The burned area was anterior and extended from the base of the neck (involving the whole anterior chest wall and most of the abdominal wall) to above the symphysis pubis.

He was treated elsewhere, not being admitted here until December 7, 1929. He had two attempts at grafting before admission, part of which were successful over his chest. Before admission he was having considerable fever and his general condition was not good; shortly before we first saw him he had been given a blood transfusion which benefited his general condition materially. On admission he was having some fever, however, which was accounted for by the superficial infection on the burned surface. His hemoglobin was seventy-three, his urinalysis negative, and it has remained so. The burned area was treated with continuous chlorazene packs and mercurochrome and ultra-violet light once daily to clear up the infection. His temperature became normal as the infection cleared up and has remained so except for one day when we allowed a small amount of infection on one area to escape our attention.

On December 23, 1929, he was skin grafted by Dr. Trusler. The granulations were prepared and wide Thiersch grafts removed from his thigh and legs, then applied to the abdominal surface. These grafts were covered with gauze soaked in two percent mercurochrome and a pressure dressing consisting of wool and ace bandages applied, wrapping him like a mummy. The pressure dressing

was removed on the fifth day postoperative at which time the graft was taking about ninety-five percent. He has had mercurochrome and ultraviolet applied to these areas every few days since then, with dry dressing. He is now twenty-three days postoperative and has almost complete healing of the abdominal wall as the few islands of granulations left will epithelize.

The chest wall had some islands of epithelium remaining from the previous grafts and he had a marked contracture at the base of the neck tending to draw the chin to the chest. The chest was also treated with chlorazene packs, mercurochrome and ultraviolet daily to clear up the infection. On January 10, 1930, the scar tissue at the base of the neck was loosened and the granulations on the chest wall were shaved down as they had become considerably overgrown. He was placed with his head overextended to prevent contracture. Since the granulations were cut down the islands of epithelium on his chest have grown so that most of the chest will not require further grafting. This area has been treated just as the abdomen with chlorazene packs, ultraviolet and mercurochrome since the last operation.

He will require one more operation at which time the area at the base of the neck will be covered with Thiersch grafts, the time of that operation being determined by how soon he will have good granulations free of infection over this area. The subsequent treatment will then be exactly as outlined with the treatment of the abdomen and chest.

The major steps in the treatment have been:

- (1) Preparation of healthy granulations, free from infection.
- (2) Thiersch grafts under pressure dressings without drainage, the dressings not being changed early.
- (3) Loosening the scar tissue and overcorrecting and maintaining the correction of the contractures.
- (4) Keeping down the overgrowth of granulations between the islands of epithelium.

The second case, Margaret, was burned in 1927—bonfire. She was extensively burned over the face, neck and chest. She was admitted to the Riley Hospital completely healed but with a very bad contracture of the neck. She had several attempts at correction of this deformity before admission.

This case required removal of the scar tissue and skin grafting in such a way as to prevent further contracture and to give a good cosmetic result. Dr. Trusler decided to do a pedicled graft, but because of the extensive burns it presented a problem as to where to get the graft.

A pedicle and flap were outlined on the back of her chest on the left side with the pedicle extending up onto the arm anteriorly. This was a very large area, about twelve inches long; but it was found necessary to make it in this way in order

to be sure that there would not be a kink in the pedicle and resultant interference with the blood supply when the flap was transferred.

In multiple stages the pedicle was loosened and rolled and the flap dissected free. The scar in the neck was removed the head overextended and the flap transferred to the neck and sutured in place. The first attempt was not completely successful and part of the flap sloughed off because the blood supply of the distal end had not been isolated to such an extent that the anastomosis through the pedicle was sufficient. Subsequently the pedicle was extended a bit farther onto the arm and the flap moved over with enough of the pedicle opened to cover the defect. This was then sutured in and the tension on the pedicle relieved by bringing the arm across anteriorly and incorporating it in the cast necessary to keep the head overextended. We now have a good take of the flap and are ready to divide the pedicle.

Subsequently the pedicle will be opened and re-applied to the axilla. The defect below will be closed with Thiersch grafts. She will be under observation for the next two years to prevent any further contracture.

This is the result of six minor operations. She will require one more to divide the pedicle, open it and apply it to the axilla at the same time Thiersch graft the defect on her side. It may be possible later to improve the scar on her neck with minor procedures.

The major steps in the treatment of this case were:

- (1) Determining a suitable flap and pedicle which would not mechanically interfere with the blood supply.
- (2) Multiple steps in isolating the blood supply of the flaps.
- (3) Removal of all scar tissue possible in the contracted area, which is then overcorrected and maintained in overcorrection.

MEDICAL CASE

EDWARD BILLINGS, M.D.

We are presenting a case of *radiculitis* involving the fourth to the ninth dorsal roots on the left side, in connection with a rather long-standing myocarditis, both of which have produced a train of symptoms quite like and rather hard to distinguish from those of angina pectoris.

The case is that of Mr. Y., aged fifty-one years, whose occupation formerly was a railroad conductor, but during the past few years the manager of an automobile repair shop, at which time he did a considerable amount of acetylene welding. He had typhoid fever before twenty, and a period of four years, between twenty-nine and thirty-three, when he received numerous injuries, namely, fracture of the skull and of the mandible, some trauma to the lower dorsal and lumbar spine, and resection of six inches of the small intestine, all of

which was the result of a railroad accident. With these exceptions he has had exceedingly good health and has carried on his occupation, which lately has been rather strenuous.

The present illness began approximately five months ago while working at acetylene welding in his repair shop. He noticed that he would feel faint and weak while working in the tonneau of a car, using his torch, if at the same time there were men Ducoing the car on the outside. Four weeks before admission to the hospital, October 10th, he began to feel very weak and suffered from precordial pain. This pain would become knife-like, tending to radiate inward and laterally to the axilla. At this time he would be short of breath and for some time afterward quite fatigued.

He was admitted to the hospital October 10th complaining of a rather dull headache, generalized weakness, and these attacks which I have just mentioned. During the first few weeks of hospitalization he had several of these attacks; we have observed them on several occasions. They occur intermittently, night as well as day, and whether he be asleep or awake. He has even been awakened out of a sound sleep by an attack. After these attacks he is cold and clammy, the blood pressure drops ten mm. to twenty mm., pulse imperceptible at the wrist—symptoms not unlike angina pectoris.

Physical examination was essentially negative with the exception of a faint depression over the ninth, tenth and eleventh spines of the dorsal vertebræ, and a small amount of tenderness on pressure between attacks over this region. During and immediately after the attacks pressure over this area causes intense pain.

We had to keep him in bed for several weeks on account of the myocardial condition. Approximately two weeks ago we decided that his myocardium was sufficiently strong to allow him to get up.

The laboratory work, including serology, has been essentially negative. The blood counts are normal. There was some rise in temperature. X-ray examination of the spine was negative. X-ray of the chest was negative except for evidence of chronic myocarditis under the fluoroscope. We made a diagnosis of probable radiculitis with myocarditis.

About three or four weeks ago he began to complain of a hypersensitive area extending from the fourth to the ninth dorsal vertebræ; the area began about one and a half inches to the right, including the spinous processes, and extending approximately five inches to the left. This area was hypersensitive, and the faintest touch of the finger would throw him into one of these angina-like attacks. We protected it as best we could by propping him up with pillows, but he still continued to have attacks requiring as much as one-half grain of morphine to relieve.

Yesterday we felt he was in good enough condition to warrant the injection of these spinal nerves. We took him to the surgery, anesthetized this area with one percent novocain, and flooded the roots of these nerves with normal saline. He experienced excruciating pain up until one o'clock this morning. Since then he has been absolutely pain-free and has been feeling fine. There is no pain elicited on pressure in this area. He has no anesthesia below the area or above—some in this area, but this is decreasing in amount. There is one spot approximately over the level of the tenth dorsal rib which is tender, and pressure there will cause him to throw himself back. We tried to map out this region, showing the point of injection and the relative position of the spine. This shows the radiation of the pain. The radiation he says goes inward and to the axilla. The heart is increased slightly downward to the left. He is now feeling well and we hope he will continue to do so.

Diagnosis: Radiculitis involving the fourth to ninth dorsal ribs, which in the presence of chronic myocarditis is producing a syndrome much like angina pectoris. He has responded so far very favorably to injection of the spinal nerves with normal saline.

THE HISTOLOGY OF THE SUPRARENAL GLAND AT VARIOUS AGES

(ABSTRACT)

JACOB A. BADERTSCHER, M.D.

Our subject is the structure of the human suprarenal gland at various ages, with especial reference to the work done by Miss Cooper, whose work appeared in 1925. We would mention with her work that of Lucas Keene and E. E. Hewitt, who worked chiefly on the development of the human suprarenal gland.

The development of the suprarenal gland was considered by them in three stages: that during intra-uterine life, that continuing through childhood, and the changes which take place in its physiological function after the gland has reached its adult structure.

The suprarenal gland has a number of origins. Its cortex arises from the celomic epithelium covering the anterior two-thirds of the Wolffian body; its medulla arises from sympatho-chromaffin tissue. The celomic cavity during its early developmental stage is lined with simple squamous epithelium all except the roof of the Wolffian body which is lined with columnar epithelium. This is the analogue of the cortex of the suprarenal gland. In later developmental stages, some columnar epithelium is still present, but in the connective tissue spaces are found some very large cells derived from this simple columnar epithelium. At a still later developmental stage these large cells have multiplied to form this large mass, but a thin layer of small cells also is derived from this columnar epithelium, so that this epithelium fur-

nishes two masses of cells. The larger mass of cells is the so-called fetal cortex. In the embryo it grows to very large size, but after birth it degenerates, while the layer of small cells then proceeds to develop into the true postnatal cortex. There is another group of cells, called simple chromaffin cells, which have come off from the gland on the medullary side. Later these develop into chromaffin cells. At this stage the fetal cortex has grown considerably while the true cortex remains a thin layer of cells around the entire fetal cortex. No chromaffin cells have entered into this cortex. This is not quite the three-month stage. At three months, the fetal cortex is larger than this, and the true cortex still remains only a very thin shell of cells around the fetal cortex. At three months the cells of the fetal cortex are large, their nuclei are large, not very chromaffilic, and each has a finely granular cytoplasm which stains very intensely with eosin. The cells of the true cortex are small and round, and even at this stage already show a few vacuoles which contain lipid substance.

At a later developmental stage the cells of the zona reticularis are loaded heavily with lipid substance. No simple chromaffin cells have entered the cortex at this stage.

During the third month the fetal cortex grows very rapidly, so rapidly that at the fourth month it makes up almost the entire suprarenal. At the beginning of the fourth month the chromaffin cells are beginning to enter the cortex. At mid-term many are there. From the seventh month to full term the fetal cortex continues to grow rapidly, but the chief feature now is the great development of the true cortex. From the seventh month to full term the zona fasciculata is quite well marked out. These cells arrange themselves in rows at the beginning of the seventh month. At the eighth month the zona glomerulosa is quite well developed. At this stage the zona reticularis is not present. The fetal cortex, while large, is now relatively smaller than in the early stages, due to the growth of the true cortex.

During the first year of postnatal life a very remarkable change takes place. At the second month after birth the medulla is developed fully. At that time many of the cells of the fetal cortex have degenerated, and others are in the process of degeneration, but at the end of the seventh or eighth month the fetal cortex has disappeared entirely. Since it disappears more rapidly than the true cortex grows in width, the suprarenal gland during the first year of postnatal life actually grows smaller, even to one-third of its previous weight. That is extreme—not many lose two-thirds of their weight. As the fetal cortex is disappearing it is partially replaced by fibrous connective tissue, which at the end of the first year separates the true cortex from the medulla as a rather loosely arranged connective tissue sheath.

At the end of the eighteenth month after birth this connective tissue layer has been absorbed and the true cortex comes in contact with the medulla.

The zona reticularis starts to develop at about the same time during the first year and is outlined definitely at the end of the third year of postnatal life.

The suprarenal gland does not grow rapidly the first year. In late childhood it grows quite rapidly, and, according to Miss Cooper, reaches its greatest size at about puberty (according to Seham, of Minnesota, a little later, say twenty or twenty-one years). This increase in size is shared slightly by the zona glomerulosa, greatly by the zona fasciculata, considerably by the zona reticularis, while the medulla grows quite rapidly.

Shortly before birth, and in early childhood, the cells of the zona fasciculata are simply loaded with lipid content. At puberty they are gorged with it, so much so that the cell columns crowd each other. Later, after puberty, these cells contain less lipid content. There never is any great amount of lipid in the cells of the zona glomerulosa, always the smallest cells of the cortex. Sometimes we can find in them a little lipid content, but if not they are quite granular.

The zona reticularis appears first well defined at three years of age. Then it gradually gets thicker, until at about middle age it is almost as thick as the zona fasciculata. Possibly as age advances it becomes narrower, so that at old age it is only about half as thick as during younger adult life; and as this zone becomes narrower it also becomes denser. Never at any time is there much lipid content found in the cells of the zona reticularis. At puberty, however, a greenish pigment begins to collect in these cells. That pigment gradually increases as age advances so that in advanced age these cells often are simply crowded with green pigment granules, so much so that the nucleus is obscured. If one cuts a fresh suprarenal gland of an aged individual very often one sees a greenish ring around the medulla, due to the large amount of this pigment. Its nature is not known. It is supposed not to be pathological. It comes and stays in increasing amounts as age advances.

The capsule, very thin in childhood, increases with age, and at old age is generally very thick.

Now there are a good many points in connection with the suprarenal gland concerning which knowledge is still lacking. The detailed work on its structure by Miss Cooper, and by Keene and Hewitt, has helped a great deal. Much of our knowledge of the suprarenal gland has been gained from the study of its structure in mammals below man, but the structure of this organ in all animals is not the same as in human beings. For example, in the suprarenal gland of sheep we seldom find any lipid content in the cells of the zona fasciculata; the suprarenal gland of oxen has only

small lipid content. For this reason the literature of this subject is apt to be quite confusing. The lipid content of the zona reticularis, according to one analysis, has a different chemical composition from that of the zona fasciculata.

As to the function of the medulla, a few years ago we all were sure about it. We know it forms the epinephrin, but we now know also that the medulla can be removed from the suprarenal gland and the individual remain healthy and live on indefinitely, so we are not so confident concerning it as we were.

We do not know what the function of the cortex is. Perhaps it is associated with the development of the nervous system, and with other early changes. Perhaps it is associated also with the development of the genital organs during the period of puberty. But even though we do not know exactly what it does, we do know that it is absolutely essential to life; that if we remove the cortex from the gland the individual dies.

WHAT IS THE POISON IN "POISON LIQUOR"?

R. N. HARGER, PH.D.

Every few days the newspapers carry stories regarding someone who has died from what they call "poison liquor." Not only are these stories used for news, but they are employed for ammunition on both sides of the prohibition controversy. They are circulated widely by the dries in order to frighten thirsty souls away from the bootlegger, and they are just as assiduously used by the wets in order to discredit prohibition by insisting that the dry laws are responsible for these deaths. The public has accepted pretty generally these stories as being correct, and, if we can judge from some statements in the medical literature, some physicians appear to believe that these deaths are due to some peculiar poison in the liquor.

That there is something in present-day illicit liquor capable of causing death no one can deny. According to available statistics, the number of deaths in the United States from liquor last year amounted to about 4,700. That is quite a large number to be killed from one single cause. As regards poisons, it is practically as large as the annual fatalities from carbon monoxide, and carbon monoxide causes more deaths than all other poisons put together, with the exception of liquor. It is larger than the death rate from many minor diseases, taking more lives than tetanus, exophthalmic goiter, erysipelas, or meningitis. Its annual toll is almost as large as that from pernicious anemia, more than half as great as from typhoid fever, and two-thirds as high as from diphtheria. It would seem, therefore, that this problem is of sufficient importance to merit some attention on the part of the medical profession and those in-

terested in toxicology. We accordingly ask ourselves, "*What is the poison in 'poison liquor'?*"

That at once brings us to the question of the chemical composition of bootleg liquor, which is, of course, a fair-sized job. While I have not analyzed specimens of liquor for prospective purchasers—not because I have not been invited to do so, but because I believe it is unethical for a chemist to do this—I have analyzed quite a number of samples of liquor which have caused death or have produced toxic symptoms. Moreover, there are plenty of other figures available from toxicologists in the larger cities and from chemists connected with some of the prohibition enforcement units. These analyses show that present-day illicit liquor may be divided into three classes: first, liquor that is imported into this country and apparently made under orthodox conditions; second, liquor made in this country under rather crude conditions, so-called "moonshine liquor"; and third, industrial alcohol, which is partly denatured and which has been diverted to beverage use. Let us see what poison could be present in each of these classes.

First, the imported liquor—what poison could it contain? It is made under approved conditions, aged properly, and therefore should contain no poison. However, I would like to remind you at this point that *ethyl alcohol itself is a poison if taken in sufficient quantity*. This is not new. Pharmacologists have for years classified alcohol along with chloroform and ether as a cause of death. Death is due to failure of respiration and circulation. In this respect alcohol is more like chloroform than ether in that, following an overdose, the circulation is much impaired before the respiration ceases. What is the fatal dose of ethyl alcohol? It is a quantity of alcohol only a little in excess of what is needed to make the person "dead drunk." Reid Hunt, professor of pharmacology at Harvard, aptly puts it,¹ "A person deeply intoxicated is *near death* and a dose of alcohol slightly greater than that is a fatal dose." After absorption the alcohol is distributed over the body and most people will be "dead drunk" when the concentration of alcohol in the body reaches five parts per thousand. The fatal concentration is somewhere around six parts of alcohol per thousand parts of body weight. The reason why most people who become deeply intoxicated do not die is because the liquor usually is taken in divided doses and the individual automatically stops drinking when he begins to go into coma. That so-called "good liquor" can kill if taken in sufficient quantity is well known and can be verified by consulting standard works on medicine and toxicology from many countries. The following case from England is typical²: A healthy man of twenty-five wagered that he could drink a pint of whiskey in ten minutes. He actually consumed one and one-half pints of whiskey in the required

time. He soon became unconscious, was taken home, and died in six hours. Plenty of similar cases are recorded in the medical literature.

The second class of illicit liquor is the so-called "moonshine" liquor. It is made under crude conditions and may contain poisons from the original mash that got into the beverage, which would not be present under standard methods of manufacture. There are two such poisons, fusel oil and acetaldehyde. Fusel oil is a mixture of the higher alcohols, largely isobutyl and amyl. It is about four times as toxic as ethyl alcohol. However, only a little of it is ever present and if you will calculate the total quantity of fusel oil in the worst specimens you find that long before the drinker would get a fatal dose of fusel oil he would be killed by the ethyl alcohol there. As a matter of fact when "raw spirits" are allowed to age in a wooden container the quantity of fusel oil actually increases, due to evaporation of some of the more volatile ethyl alcohol and water. Acetaldehyde presents a somewhat similar case. It is about ten times as toxic as ethyl alcohol but the quantity present is never over one part per thousand of total alcohol so that its presence could not increase the toxicity of the liquor more than one percent.

Of the three classes of bootleg liquor, that which is made from partially denatured alcohol presents the most complicated situation. There are two kinds of denatured alcohol. The first one is termed *completely denatured* and can be purchased at any filling station or paint store. It contains methyl (wood) alcohol together with some kerosene. Methyl alcohol is a dangerous poison and is capable of causing death in smaller concentration than is required for ethyl alcohol. However, the fact seems to be that at the present time very little bootleg liquor contains any methyl alcohol. In Massachusetts two years ago the state chemist, who assists in prohibition there, reported that out of 8,800 specimens of illicit liquor examined by him, only eight contained any methyl alcohol.³ In the early days of prohibition some liquor did contain methyl alcohol, but the bootleggers are now afraid of it, and if one can judge from reports of analyses from various sections of the country,⁴ at the present time there is usually no methyl alcohol in illicit liquor. This is not invariably the case, however, and sometimes people are killed by drinking liquor containing methyl alcohol. About a year ago at Peoria, Illinois, twenty people died in a few days, all of whom had patronized one bootlegger. These deaths were due to methyl alcohol. Analysis of the liquor by United States government chemists showed that it was almost pure methyl alcohol and contained no ethyl alcohol whatever. This particular bootlegger had been tapping tank cars of pure grain alcohol to supply his customers and this time he tapped the wrong car, which contained methyl alcohol intended for denaturing purposes. This sort of thing is unusual and government statistics show that for every

person who dies of methyl or denatured alcohol about twenty die from liquor containing no methyl alcohol.

The second class of denatured alcohol is partially denatured and is termed *specially denatured alcohol*. Various industries require alcohol. This is perfectly legitimate and will, of course, continue. Each particular industry requiring alcohol may have its alcohol denatured in a certain way suitable for its own manufacturing processes, and at the present time the list of formulas for specially denatured alcohol numbers about fifty, employing for this purpose some eighty chemicals.⁵ These chemicals range all the way from carbolic acid and nicotine to arnica and oil of cloves. If a manufacturer is making vinegar he must use alcohol, so his alcohol is denatured with vinegar. Occasionally a dishonest firm will divert some of this specially denatured alcohol to the bootleg trade. Most of the chemicals used as special denaturants are removed easily by distillation so that few of them actually get into the illicit liquor. Furthermore, if you examine these fifty different formulas for specially denatured alcohol and will calculate the toxicity of the denaturant, you will find that with most of the formulas a consumer drinking them without purification at all will be killed by the ethyl alcohol present before he gets a fatal dose of the denaturant. Some of these chemicals might cause chronic poisoning if taken in small quantities over a long period of time, but most of the deaths ascribed to "poison liquor" are too sudden to be explained in that way.

By this process of elimination we can arrive at only one conclusion, and it is that ethyl alcohol is about the only substance which can account for these deaths. I realize that this is negative evidence and that you cannot convict a man of a crime simply by showing that his neighbors did not do it. Is there anything in the way of positive evidence regarding this problem? Yes.

In the first place, animal experiments have been made with this material. Two years ago Prof. Reid Hunt of Harvard¹ took one hundred specimens of bootleg liquor served in Massachusetts, some of which had caused death, and tried their toxicity on animals. He gave these animals a dose of the liquor furnishing a quantity of ethyl alcohol just below the known fatal dose of ethyl alcohol; he also ran controls, using pure ethyl alcohol and also pre-war whiskey which happened to be in the state laboratory there. He found in every case that the toxicity of these specimens of bootleg liquor corresponded exactly to their ethyl alcohol content. If they had contained any poison other than the ethyl alcohol they would have killed in lower concentration than was found to be the case.

If these deaths are due to ethyl alcohol, then victims of this type of poisoning should have in their bodies at the time of death the concentration

of ethyl alcohol which is known to kill. This is exactly what has been found. The coroner's chemists of New York and Chicago have each published a large number of analyses^{6 7} in cases of this sort, and their figures show that in practically every sudden death from liquor the body of the victim contained enough ethyl alcohol to account for his demise. My own experience, from quite a number of analyses made upon victims of sudden death from liquor, is entirely in accord with this view. For most of my analytical material I am indebted to Dr. C. H. Keever, coroner of Marion county. I will give you just two of these cases which are typical.

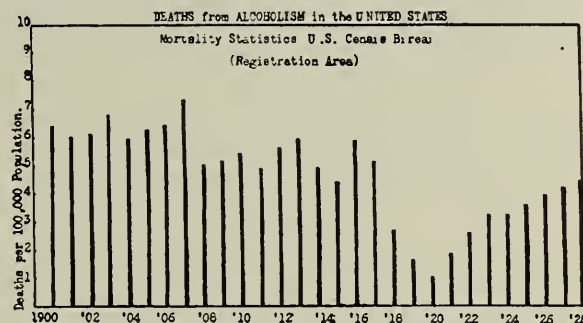
The first case was an Indianapolis man who came home intoxicated, again drank heavily, went to bed, and was found dead the next morning. He had been dead for several hours. The next day we drew blood from his heart and analyzed it. This blood was found to contain ethyl alcohol, the quantity present being 6.6 parts per thousand. No methyl alcohol was present.

The second case was brought to me by a coroner from a border county in Illinois. Three young men had been in a drinking party, and when they were found twenty-four hours afterward, one was dead and the other two were very drunk, but later recovered. The coroner brought me over the organs from the one who died and a sample of the liquor. Over in Illinois they have a law which states that if a bootlegger sells liquor to a man and that man dies from it the bootlegger is guilty of manslaughter. The coroner wanted to know what poison was in the liquor. I told him that I probably would not find any poison except ethyl alcohol. He said it did not make any difference, the law covered that; if the liquor killed the purchaser then the bootlegger was guilty as he had no business to sell it. I found no poison except ethyl alcohol, but plenty of that to account for the man's death. The liquor itself contained eighty-five percent of ethyl alcohol, not a trace of methyl alcohol, and no substance used in denaturing industrial alcohol, although it was evidently redistilled industrial alcohol. When the case came to trial the bootlegger pleaded guilty and is now serving time in the Illinois penitentiary.

From the coroner's standpoint it is easy to obtain material for alcohol analyses, because a little blood will do and by using a syringe and long needle one can often draw blood directly from the heart without even bothering to open up the body. Such blood samples, if allowed to stand, should be preserved by the addition of sodium fluoride—five grains of the fluoride for each ounce of blood. In fatalities where alcoholism is suspected a chemical analysis is almost indispensable, for, as pointed out recently by McNally,⁷ without the help of a chemical analysis some cases will be classed as acute alcoholism where the person had had no alcohol at all, while some victims of genuine alcoholism will be called heart disease or

some other equally wrong verdict.

At this point you would perhaps like to ask the following question: Granting that ethyl alcohol will produce death in some cases, still, why is it that there has been such an increase in deaths from liquor since prohibition? The answer is that *there were actually more deaths from liquor in the "good old days" before prohibition*, as the following chart taken from the United States government mortality statistics will show:



While I realize that mortality statistics are no more infallible than the people who report them, there is no reason to believe that there has been any change in the accuracy of these reports since prohibition. Prohibition really began with wartime regulations in 1918. What are the facts regarding the death rate from alcoholism in the United States since 1900? It begins with 6.4 and for a number of years was about the same. About 1918 it began to drop, reached a low point of nearly 1.0 in 1920, and since then there has been a rise. The figure for 1928 is 4.3, but not yet as high as before prohibition. These figures are not quite fair, for this reason: In the early part of this period many of the states were not in the registration area and at first the registration area contained a larger proportion of "wet" states where the death rate from alcoholism always has been higher than in the "dry" states. But even with that correction you can see that there were plenty of deaths from liquor long before prohibition. The other day the newspapers stated that 30,000 people had died from alcoholism in the ten years since prohibition. That is probably about correct, but had they taken the trouble to examine the similar ten-year period preceding prohibition they would have found almost double that number of liquor deaths. Since most of the present-day American liquor is "hard liquor" the surprising thing is that there are not more deaths from it. One might use this chart to philosophize some regarding the effectiveness and trend of prohibition, but that is not a part of our present discussion.

When we consider all available evidence, from the absence of other poisons in most of the liquor, from animal experimentation, from the quantity of ethyl alcohol in the bodies of the victims, and from the records of alcoholic deaths before and since prohibition, we must conclude that the poison

in "poison liquor" is usually *ethyl alcohol*, the very thing that gives the "kick" to the liquor. It would seem that so-called "good liquor" becomes "poison liquor" if the concentration in the consumer exceeds five or six parts per thousand.

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THE IMPORTANCE OF DEVELOPMENTAL ABNORMALITIES IN THE DIAGNOSIS OF DISEASES OF THE KIDNEYS

(ABSTRACT)

H. O. MERTZ, M.D.

In the presentation of the subject of developmental abnormalities of the kidneys and ureters it is hoped the student body may be impressed with two facts: First, that anomalies of the kidneys and ureters are relatively frequent, and, second, that they are not of but academic interest as an accidental finding, but that they have a real clinical significance and importance in diagnosing diseases of these organs. As a student in medical school the mere mention of a condition as being an anomalous one was sufficient to cause me to pass the subject without further thought. I considered it of interest only to the anatomist and student of gross pathology and that it had no importance to the clinician as he studied his patient at the bedside and of but minor significance to the surgeon in his operative efforts. Therefore, insofar as I am concerned, they were neglected. However, special study in the field of urology soon disclosed to me the error of this position.

Embryologically the development of the kidney and ureter with the migration of the kidney from its early position in the bony pelvis to its normal location in the adult is complex, and is just such a change as would be conducive to the development of anomalies of positions, of relations and of structure. The ureter and the pelvis spring from the Wolffian duct as a bud, while the kidney takes its origin from the caudal end of the Wolffian body. This ureteral bud penetrates the mesothelial mass and is surrounded by the primary kidney cells. Normally the kidney with its characteristic shape and smooth surface reaches the loin and is drained by a single ureter which opens into the bladder. This is the usual condition thought of in our patient and the clinical symptoms observed at the bedside are studied with this relationship in mind. Only too often such is not true, and what seems so difficult to explain is disposed of easily when the actual conditions are known. As indicated there are anomalies of position, that is, a kidney may not reach its normal location in

the loin but be arrested at any point in its ascent. Again as the kidneys are paired organs they are subjected to failure of development and but one kidney may be present in the adult; and lastly because of the complex mechanical processes involved in the development of the ureter and its union with the kidney, and because of the close proximity of one kidney to its fellow in their first development in the pelvis, there may be changes in form and structure of the kidney.

Now the very great clinical importance of these alterations rests with, first, the interference which the anomaly may produce in the urinary drainage; and, second, with the alterations of the nutrition of the organ through abnormal blood supply rendering the organ more vulnerable to bacterial invasion or to loss of nephrogenic tissue incident to the anomaly, thus lowering kidney function.

The normal ureter leaves the normal pelvis at its lowermost point and seldom but the mere tip of the lower calyx lies below the level of the uretero-pelvic junction. The ureter follows an almost straight line until it reaches the bony pelvic brim and has free drainage into the bladder.

The normal kidney pelvis normally should never contain sufficient urine to separate completely its walls. Maintenance of this free drainage is the greatest safeguard a kidney can have against renal infection and any condition which will in itself interfere with this drainage must have a clinical and diagnostic importance. As an illustration let us consider the anomaly as to number, a single kidney, with a stone in its pelvis, its fellow on the opposite side for some reason having failed to develop. Let such a stone fall into the ureter and suddenly block it and the importance of an accurate diagnosis is brought home to us at once. Clinically an anuria exists; the x-ray shows a stone; the kidney on this side is tender, probably palpable as such organs are necessarily hypertrophied, and an emergency exists, the proper solution of which must depend directly upon a proper appreciation of existing conditions. Or another instance of the same anomaly—a young child, previously well, develops suddenly a severe pyelitis. A palpable mass is felt in the loin and the diagnosis of an enlarged infected kidney is made and as in a simple pyelitis in children very seldom if ever can the infected kidney be felt, and as an infected sarcoma of the kidney in children frequently does give such a finding, a bedside diagnosis of such a neoplasm is made. Such an instance was seen by us recently in an eighteen-month-old child and I need not mention the distressing results which would have followed surgical intervention upon the tumor without the knowledge of the congenital absence of its fellow.

As for an anomaly influencing the structure of the kidney, causing grave disturbance in function, this is most beautifully shown in the congenital polycystic kidney. The straight collecting tubules, being a part of the ureter and pelvis in their

embryological origin, fail to unite with the distal convoluted tubule, which is mesothelial in its origin. The result is faulty drainage of the urine and the development of multiple cysts. The kidneys are enlarged in volume, their surfaces become bossilated and irregular and the function is impaired. Ureteral drainage is interfered with through distortion of the calices or pressure upon the ureter and infection results. An interstitial nephritis is an early development with the usual cardiovascular changes following. The condition is bilateral. This is an important point to remember in such an instance and surgical removal of such an organ, even though the opposite kidney may show no gross evidences of the disease, should be undertaken only after careful study as repeated instances of the remaining kidney rapidly undergo such a change after surgical removal of its mate have been recorded. Of the anomalies of form the two most important are the double kidney and the fused kidney. The latter may be with both kidneys on one side of the spine, the unilateral fused kidney or the sigmoid kidney; or the kidneys may lie on opposite sides of the spine with fusion of usually the lower poles—the horseshoe kidney. These types are of clinical importance because of pressure from the tumor mass or because of interference of drainage through ureteral obstruction and the diagnostic problem in the horseshoe kidney is that of the recognition of the anomaly in its explanation of the resulting renal stasis. The ureters are forced to follow an abnormal course, they must pass over or under the isthmus connecting the two kidneys, also the pelvis lies anteriorly due to faulty rotation of the organ. The double kidney has this clinical importance but has also the added problem of but one-half of the kidney being diagnosed as the entire organ with the disease limited to the remaining unrecognized half of the organ. As an illustration, a stone shadow in the cephalic pelvis of a double kidney may be considered extrarenal because of the visualization of but the caudal stone-free pelvis. Many instances of this mistake have been recorded and doubtless a far greater number of errors in failing to locate a renal infection, because of similar findings, have been made and never recognized.

Of the anomalies of position the abnormal location first necessitates abnormal blood supply, which always lowers an organ's resistance to infection. As normally the developing kidney in the bony pelvis has its pelvis directed anteriorly and as it ascends in the abdomen it undergoes a lateral rotation until when it reaches its normal position in the abdomen, the pelvis is directed laterally and slightly posteriorly, it is evident in its arrested position there will be a greater or less interference with the normal rotation, depending upon its anomalous position. This frequently interferes with normal drainage and results in urinary stasis with its sequelæ. Again these abnor-

mally placed organs are often painful to palpation and may be very confusing when discovered by the clinician and they are not infrequently incorrectly diagnosed, being mistaken for enlargements of, or tumors in other abdominal organs normally situated in the region in which the misplaced kidney happens to be found.

When clinically an obscure urinary tract lesion exists and it is difficult to explain the bedside findings from data at hand, do not be too easily satisfied but always recall the importance of anomalous conditions and eliminate them. A palpable tumor mass in any part of the abdomen or bony pelvis may be kidney; the attack of pain may be situated in a location far from the normally located kidney; the pain may also be referred in an abnormal manner; an x-ray shadow of a urinary stone may be in a location little suggesting its nature; or be considered extrarenal through failure to recognize an existing anomaly. Before any surgical attack contemplating removal of a kidney is made on your patient always recall and eliminate the possible anomaly as to number, the single kidney, and as to structure, the polycystic kidney. It is sometimes the difficult thing to do—it is always the wise thing to do.

The diagnosis of these anomalies is dependent directly upon the x-ray visualization of the kidney pelvis, and its interpretation, for which reason I shall occupy the remainder of my time in reviewing with you what constitutes the normal pelvis as outlined in the pyelogram indicating the variations as we find them in the various anomalies mentioned.

ANOMALIES AS TO NUMBER

Excess of tissue in the production of an entirely separate supernumerary organ is rare and this rule applies to the supernumerary kidney as well as in other portions of the body. I have never clinically diagnosed such a finding.

A single kidney, its fellow being congenitally absent, is rare but is found in possibly one in twenty-five hundred to one in three thousand cases. I have diagnosed this anomaly twice. Of thirty-nine cases of single kidney reported twenty-seven were in males and twelve in females. The ureter on the side of the absent kidney may extend up into the abdomen for a varying distance when it ends in a blind pouch, or it may be absent entirely. There may be a ureteral orifice in the bladder even with but small amount of the ureter present, or the ureteral orifice may not be present. The single kidney may be situated in any location between the normal position in the loin and a true ectopic kidney in the pelvis. Also a crossed dystopia may occur with a single kidney. The clinical significance of a single kidney is abundantly emphasized in the report of eighteen cases of calculous anuria collected by Elliott in 1910, fourteen of whom died. Since this report many similar cases

have been recognized and the patients relieved of the retention through operative or mechanical means. Nephrectomies because of stone, tumor, hydronephrosis, pyelonephrosis and tuberculosis have been performed, always, of course, with death of the patient.

ANOMALIES AS TO FORM

Anomalies as to form comprise five general types: the horseshoe kidney; the unilateral fused kidney; the sigmoid kidney; the lump kidney; and the double kidney.

Horseshoe Kidney: A horseshoe kidney may be symmetrical when the amount of kidney tissue on each side of the spine is approximately the same or asymmetrical when that on one side of the spine is greater than on the opposite side. Fusion of the horseshoe kidney occurs in eighty-eight to ninety percent at the lower poles. Autopsy shows a horseshoe kidney in one to seven hundred and fifty cases while operative findings show it in one to one hundred and twenty-five cases which indicates the influence of this type anomaly upon the development of disease in the organ. I have encountered this anomaly several times and no doubt have overlooked many others. Statistics as to sex are very confusing and are far from conclusive. The horseshoe kidney may lie at any point in the abdomen or may rest in the bony pelvis. The pelves in the horseshoe kidney are directed anteriorly and there are usually two pelves to the kidney—one on each side of the spine. However, cases have been reported in which there was but one pelvis supplying both halves of the kidney. Rovsing's phenomenon—a tendency to relief of abdominal pain through flexion of the body on the abdomen, or aggravation of the pain through hyperextension of the body, due to variations of pressure upon the large abdominal vessels and sympathetic fibers in this locality, the result of the isthmus crossing the spine—is considered rather characteristic of this anomaly. The x-ray in a horseshoe kidney shows an anterior pelvis with one or both of the pelves overlying the shadow of the spine or abnormally close to it. One or both usually are displaced downward.

Unilateral Fused Kidney: Unilateral fused kidney is a rare anomaly and is distinguished by all the kidney structure being to one side of the spine with the complete union of both kidneys, the bottom of the upper kidney being fused to the top of the lower one. The pelves of both kidneys are directed in the same general outward direction while the ureter from the lower pelvis crosses the spine in the lower lumbar region entering the bladder on the opposite side. I have had one case of this type anomaly.

Sigmoid Kidney: Sigmoid kidney is far more rare than the above. Both kidneys are on one side of the spine, united as in the unilateral kidney, but the pelvis of the upper kidney is directed outward and backward while that of the lower is

directed inward toward the spine, which means that the union of the two kidneys has occurred after rotation of both kidneys has taken place. The arrangement of the ureters is identical with that of the unilateral fused kidney. It is interesting to know that in these anomalies it is the right kidney that is pulled to the left side most and the anomaly is more frequent in the male than in the female. Symptoms from these anomalies are due to pressure or diseases of the organs themselves. I have diagnosed one case of sigmoid kidney.

Lump Kidney: Lump kidney may be located in any portion of the abdomen and is but an asymmetrical union of the two primitive kidneys. The symptoms from this type anomaly are usually the result of pressure or due to faulty drainage from the kidney pelvis.

Double Kidney: The double kidney is where the kidney has two distinct and separate pelves drained by two ureters which may unite in their course through the abdomen or may open into the bladder at separate orifices. They may be unilateral or bilateral. The double kidney may occupy any position in the abdomen and it is not unusual to be found in a varying degree of dystopia. It is a relatively frequent anomaly and its accurate recognition and diagnosis are important in the treatment of a case. I have diagnosed many anomalies of this type and my series comprises six with bilateral duplication of the ureters.

ANOMALY AS TO LOCATION

Ectopic Kidney: As indicated, a kidney may assume any position in the abdomen or pelvic cavity. The ectopic kidney occurs once in about twelve hundred cases. The displacement may be unilateral or bilateral. It may occur when but a single kidney is present or a crossed dystopia may exist. Unilateral dystopic kidneys occur more often on the left side, possibly seventy percent. It is true that all fused kidneys may show some congenital ectopia. They are found more frequently in the female, possibly because of the greater ease in palpating the pelvic organs in the female, and more frequent operations upon the lower abdomen in the female. The cause for failure of ascent of the kidney is not definitely known, but possibly the vascular supply of the kidney in its failure to disappear at the proper time has a bearing upon the abnormal location of the kidney. As to the question of fusion of the bilateral ectopic kidney Papin says that possibly "the majority of bilateral pelvic kidneys are fused," while such certainly cannot often be determined with accuracy without operative exploration of the organ. The symptoms are usually due to some degree of infection as there is frequently interference with the drainage of the kidneys. Also the abnormal location of the kidney often subjects the kidney to unusual trauma which the normally placed kidney does not have to sustain. This type kidney is often diagnosed by palpating the tumor mass and

employment of the x-ray and pyelogram will determine definitely the location of the organ. I have diagnosed several instances of abdominal and pelvic dystopia, and have studied two cases of bilateral pelvic dystopia.

ANOMALIES AS TO STRUCTURE

The congenital polycystic kidney is not an infrequent urological finding. We personally have studied eighteen such cases. The kidneys are located usually in the upper abdomen, but may occupy any location in the abdomen. The tumor may be found at any age of the patient or may be present at birth, but usually they begin to give symptoms during middle life (from thirty to forty-five). The lesion is always bilateral, and not infrequently the lesion on either side can be felt. Often an early x-ray sign of congenital polycystic disease of the left kidney is an elevation of the left arch of the diaphragm. The growth of the tumor may be very rapid in the terminal stage and it would seem that trauma or disease has a stimulating effect upon the rapidity of the development of the disease. There is a definite tendency for familial transmission of the disease and often many members of the same family may be affected similarly. The symptoms of interstitial nephritis with increased blood pressure are common in this disease and these patients usually die from apoplexy, uremia or urosepsis. The pyelogram is typical and a diagnosis usually can be made with accuracy in this manner.

Thus briefly I present to you the problems of diagnosis which are peculiar to the maldeveloped kidney. Remember its frequency, and demand its elimination in your obscure case of abdominal pain or tumor, and I am sure you will be gratified with the number of instances in which an otherwise unexplained finding is accounted for clearly.

“NO DIPHTHERIA IN INDIANA
IN 1930”

At the West Baden meeting of the Indiana State Medical Association in 1926 the above slogan was adopted with the best of intentions. Well, 1930 has come and diphtheria is still here—very much here indeed! Last year (1929) it took the lives of 158 children in our fair state, and already it has exacted its toll in the brand new year. In spite of the fact that diphtheria is thoroughly worked out from the scientific standpoint it is allowed to skulk among us and grab off our children at the rate of three a week.

One hundred fifty-eight kiddies! Enough to fill a five-room schoolhouse or a small cemetery, whichever we prefer! Enough to change the course of history if among them there were a baby Shakespeare or an Edison!

From a cold business standpoint, not to mention the worry, trouble and sorrow, it probably costs as much to bury 158 children, treat 3,000 cases,

and stand the various other expenses of sickness, quarantine, loss of school, loss of time, etc., as it would cost to immunize the 60,000 children who are born each year in the state. In one case we pay our money and lose the children; in the other we pay our money and keep the children.

The Indiana State Medical Association, under the leadership of its president, Dr. A. C. McDonald, and the never-ending insistence of its editor, Dr. A. E. Bulson, is determined to whip diphtheria in Indiana. The present committee has been appointed to point up the work, *but success can be attained only if the entire profession enters whole-heartedly into the fight.* The committee feels safe in taking for granted the entire cooperation of the State Board of Health, the medical school of Indiana University, the Parent-Teacher Association, luncheon clubs, women’s clubs, and all other organizations interested in the welfare of children—as who is not!

Two great objectives are to be attained:

First: The *selling* of the idea of practical immunization to the profession.

Second: The *education* of the laity to the end that they may see the value of the protection afforded by immunization and will bring their children to the family doctor for such service.

The Indiana State Medical Association, under the direction of the Diphtheria Committee, is planning an intensive campaign which in the course of a few years should reduce diphtheria to a very low level. We shall need the assistance of every physician and parent in Indiana.

Signed by the Committee,
THURMAN B. RICE, M.D., Chairman,
C. S. BOSENBURY, M.D.,
E. R. CARLO, M.D.

Diphtheria Committee,
Indiana State Medical Association:

Gentlemen:—I am greatly pleased that the committee on the prevention of diphtheria is taking this important matter to heart. I have noted carefully the prepared program and it has appealed to me as being most complete.

I have no illusions as to the magnitude of the undertaking and that you will succeed 100 percent would be asking too much, but I do believe such progress can be made that you can show in actual figures what you have done for the children of Indiana.

Fraternally yours,
A. C. McDONALD, M.D., President,
Indiana State Medical Association.

Diphtheria deaths for January, 1930, in Indiana:

| | | | |
|-----------------------|---|------------------------|---|
| Allen County..... | 1 | Lawrence County | 1 |
| Clinton County | 1 | Marion County | 4 |
| Delaware County | 1 | Morgan County | 1 |
| Elkhart County | 1 | Perry County | 1 |
| Howard County | 1 | Tipton County | 1 |
| Jay County | 1 | Vanderburgh County.... | 2 |
| Knox County | 1 | Wayne County | 1 |

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ALBERT E. BULSON, M.D., Editor and Manager

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EDITORIALS

FUNCTION OF THE GALL-BLADDER

One of the most fascinating fields for research work has been an attempt to determine the function of the gall-bladder. This little viscus, which plays such a large role in upper abdominal surgery, has so far defied the most astute and diligent students of physiology. There is a long list of names associated with a study of its function, many of them famous as research workers, but a completely satisfying answer appears not to have been given to the question, "What is the function of the gall-bladder?" The latest suggestion coming to notice is offered by Dr. Bela Halpert in a paper published in the *Archives of Surgery* for December. While the resorption function of the mucous membrane of the gall-bladder resulting in a concentration of bile generally is accepted as an important step in gall-bladder physiology, Halpert goes a step farther and suggests this as being its major function. Briefly expressed, the real function of the gall-bladder is to take something out of the bile and throw it back into the circulation where it is needed, rather than let it all be drained into the gut, which has no power to extract this substance. Halpert, therefore, raises the question whether any bile which finds its way up to the cystic duct into the gall-bladder ever leaves this viscus by the same route. He thinks not, and offers a number of reasons for his belief. These reasons are based partly on anatomical structure of cystic duct and gall-bladder, and partly upon experiments performed in his laboratory. Biliary stasis, which we ordinarily think of as being produced by something which interferes with free flow of bile through the cystic duct, he claims results from one or two conditions, or a combination of these conditions, which he explains as follows: If the liver, as a result of disturbed function or possibly because of abnormal blood constituents delivers bile to the gall-bladder containing elements in quantities too large for a normal mucous membrane to resorb from the bile, then there is a stasis of this element in the bile. Likewise if the mucous membrane of the gall-bladder be diseased, its resorptive powers are lessened and there is again stasis of possibly many

of the elements of the bile. Or both of these conditions may be present to produce the stasis. In this connection he would explain the disappearance of the shadow in cholecystography on the assumption that the dye once it enters the gall-bladder does not leave by way of the cystic duct, but is resorbed into the circulation. This assumption would call for a complete change in the interpretation of cholecystographic shadows. The stasis which follows from an altered bile he calls hepatogenous stasis, and that due to a diseased gall-bladder he calls cystogenous stasis. These two types of stasis may produce three kinds of gall-stones, namely—"pure gall-stones," "mixed gall-stones," and "combined gall-stones." Pure gall-stones are formed of those elements contained in bile in such quantities that a normal gall-bladder is unable to resorb completely, such as cholesterol. Mixed gall-stones are formed of those elements of the bile which a diseased gall-bladder is unable to resorb, which indeed would be all the stone-forming elements of the bile. Combined gall-stones would be composed of a core of pure gall-stone elements and a shell of mixed gall-stone elements, the order in which layers appear depending upon whether a cystogenous or hepatogenous stasis occurred first. Thus gall-stones tell the story of the gall-bladder.

SODIUM AMYTAL IN SURGERY

With the perfection and introduction of sodium amytal into general uses the surgeon is furnished with an asset whose value scarcely can be estimated, says one of Indiana's prominent surgeons, who continues as follows:

Everyone doing surgery is called upon at frequent intervals to operate a case in which operation is imperative and at the same time the risk is great. One factor that always must be considered as adding to the risk is the agent to be used as an anesthetic. Even the use of a local anesthetic is not without its drawbacks as long as the patient is conscious and capable of the sensation of fear. Through the months in which sodium amytal has been given many trials it has been found to be practically free from danger. In case of hypotension there is a decided drop in blood pressure. This is very marked and at first was believed to be dangerous. Subsequent experience seems to have proved that this danger is negligible. In cases of septic infection, in which the patient is making a desperate fight for life, an operation for drainage is indicated. Sodium amytal is ideal, in that it seems not to lower the resistance. In cases following accident, in which the patient is in shock, it sometimes becomes necessary to operate at once to control hemorrhage or for some other urgent reason. Sodium amytal is the ideal anesthetic as it adds little or nothing to the shock. In cases of toxic goitre, in which operation is dreaded by the surgeon and feared by the pa-

tient, sodium amytal finds a field of utmost usefulness. The injection is given the patient in bed in her room, she is sound asleep before leaving the room, never knows when she goes to the surgery, and is spared the nervous upset of this marked change in surroundings. Truly, this is a haven for the goitre patient. In the cases of acute intestinal obstruction, where there is great shock and dehydration, sodium amytal appears to answer the question of an anesthetic admirably. There is no struggle. There is good relaxation. There is speedy awakening and there appears to be less trouble with flatulence afterward. Even in the case of the prostatic obstruction in which prostatectomy is to be done there appears to be no contraindication to sodium amytal as an anesthetic.

More and more surgeons are coming, and correctly, to the practice of giving this anesthetic in the room of the patient for whatever the operation may be. In the beginning full doses were given, twenty-five grains, and this depended upon for the entire surgical procedure. Any operation can be done under this method, but it has a contraindication in the fact that the patient sleeps too long after its use. In our experience it has been found best to give sodium amytal in doses of ten to fifteen grains, and this supplemented with a very small amount of nitrous oxide. In patients so treated, relaxation is good, bleeding is about the same as with nitrous oxide alone, and the awakening period is very short.

MEDICAL PRACTICE AS A BUSINESS

A representative of big business says that the practice of medicine is not on a business basis, though it could be on a business basis and made to pay if managed properly. At present the burden of the system bears heaviest upon neither the wealthy nor the very poor, but upon the average person. It discourages the average person from trying to secure the best of medical attention, and no business which is organized in such a way as to discourage the masses from becoming customers is on a solid economic basis, no matter how excellent its scientific attainments may be. The argument then is advanced that Ford made his great success by producing a car that appeals to the masses, and he made his business pay. On the other hand, it is admitted that no business is any good that is organized merely for profit. It must be organized for service. Though the business of medicine does not make a profit it has no way of measuring its services. The healing business should be profitable, even hospitals should be profitable.

The keynote of the argument and a point that we have urged ourselves, is advanced when the writer says that our whole system of doing business must be revamped so that there will be reduction of unemployment and the raising of wages

to such a standard that practically everyone shall be able to pay for all the services which he needs. In the meantime it is proposed that clinics and health centers should be established, not as charity but on a strictly business basis. He therefore recommends that physicians would do well to organize as business institutions, to merge their knowledge, to reduce their overhead, to provide every member of the organization with the best and latest in equipment which medical science has devised, and to place all these advantages at the service of the public, not at prices which seem either good or merely reasonable, but at prices which on objective analysis it is found that the public can afford to pay. That there would be profit, real profit, perhaps hitherto unheard of profit, from such a healing business, the representative says he has every reason to believe. The principle which must be given first attention is that of serving the greatest possible number at the lowest possible cost. "Every doctor knows that it is less costly to stay well than to get well after one has broken down, just as it is more economical to keep one's car in good condition than to wait until it falls to pieces on the road. The doctor, then, who wishes to give maximum service will give special emphasis to preventive measures, not merely agitating the idea of regular consultation, but organizing his resources and adjusting his prices in such a way that large numbers of people will consult him regularly for the specific purpose of keeping themselves in good running order. When doctors generally get that idea, competition will do the rest. It will compel combinations and the merging of resources, and a constant searching for better methods of giving greater values for the price."

All of which sounds well, and perhaps in a measure may be put into effect, but in the final analysis it will be found that the practice of medicine cannot be made to conform to the system and machine-like methods of the Ford automobile factory.

BANANAS IN INFANT FEEDING

The role of the banana in the diet of infants is an interesting paper by L. O. Von Meysenbug in the August number of the *New Orleans Medical and Surgical Journal* in which the author reports results in two hundred fifty babies to whom the banana had been fed as a fraction of the routine dietary. He points out that the fully matured, golden-brown skinned banana contains eleven percent glucose, eight percent sucrose, and one percent starch. Protein constitutes less than one percent of the edible portion and the fat is entirely negligible. In comparison with other fruits in common use, such as orange and lemon, it is low in calcium, high in phosphorus and magnesium, and excels in

iron all other fruits excepting strawberries. It contains a sufficient quantity of fat-soluble vitamin A, it has at least the same vitamin B value as tomato juice, it has a deficiency of vitamin D, and a small quantity of vitamin E. As regards the anti-scorbutic factor, the banana is second only to orange juice. In feeding bananas to babies it is essential that the banana must be thoroughly ripe, which means that there must be no green in the skin, and it must be entirely yellow with black spots, or the skin may be brown provided the pulp is not mushy or brown. Furthermore, the banana must be macerated completely, preferably through a fine wire mesh sieve. Lastly, judgment must be exercised in not giving too much to the baby. All babies love it and would eat any quantity. The constipated baby usually is relieved greatly, for the most part no other measures being directed against constipation. When starting a four or five months old baby on banana feeding, one teaspoonful only of the mashed pulp is given for the first few days. If well tolerated, it is increased practically up to six or eight teaspoonfuls. If the baby refuses it the first time, it is offered again on subsequent days and the dislike invariably changes to a desire for more. The author says that of the diseases in which the banana has a definite therapeutic indication, celiac disease and scurvy are representative. In clinical and experimental scurvy the banana is curative. Because of its low protein content, the banana is a valuable adjunct to the dietary treatment of nephritis. In conclusion the author says: "Often called the poor man's food, the banana is always plentiful and cheap. It is a nutritious, easily digested form of carbohydrate that nature puts up in a sterile container. Infants as young as four months tolerate ripe banana perfectly when given in moderation. All vitamins except anti-rachitic D are well represented."

HOW TO IMPROVE THE ECONOMIC CONDITIONS OF THE PHYSICIANS OF INDIANA

The work of the Committee on the Cost of Medical Care, which has been organized to study the economic aspects of the care and prevention of illness, ought to bear fruit in a variety of ways that will be beneficial to the public, the hospitals and the medical profession. We have been interested in the work going on in Indiana, which has been centered in Shelby county, and up to the present time the facts discovered and analyzed seem to point to some suggestions which one of the committee has made concerning the possibilities of improving the economic conditions of the physicians of the state.

One of the investigators says: "The main problem is to divert certain income which at present is going away from the physician, back to him. I

refer particularly to the money paid cultists and for proprietary medicines. I feel safe in saying that at least fifty thousand dollars a year is spent on chiropractors and proprietary medicines in Shelby county alone. Aside from the fact that the good people of Shelby county are victimized to a certain extent by this species of quackery there is a direct economic loss to the trustworthy physicians of the county. Methods of control that might be effective against these two sources of loss from the viewpoint of the physician would be publicity and legal control. Of these two the legal method probably would be more effective, as it would be difficult to obtain sufficient funds to engage in an intensive publicity campaign that would be effective against any of the well-advertised proprietary remedies, backed, as they often are, by enormous capital and in a measure supported by the lay press which profits enormously from the advertising."

A second suggestion from the investigator concerns the business methods of physicians. "Few of the physicians put their free work on their books. If a physician thinks a patient is not able to pay, no charge is made and no record is kept of the services. In contrast, every dentist charges and makes a book entry for every service performed." The investigator says that he thinks the practice of making a charge in every case is a sound business procedure, beneficial both to the physicians and also to the patient and general public. This does not mean that physicians should be hard creditors, but as a matter of practice they should charge for every service and lead the patient to expect that some payment should be made.

Another pertinent suggestion of the investigator which conveys an idea we have emphasized repeatedly in *THE JOURNAL*, is that bills should be rendered promptly and regularly, probably monthly. The philanthropy of the profession certainly is something to admire, but many physicians have made a fetish of their poor business methods.

The fourth suggestion is that a record of incomes of physicians of the state be collected each year as a matter of routine, and include both gross and net incomes. The advantages of such figures, especially if other states did likewise, would be many. Instead of being a hit and miss system of distribution, which we have at present, there would be some basis for an intelligent allocation of physicians. For example, if it were found that in the city of Indianapolis the net income of physicians is fifty per cent higher than in any other community in the state, Indianapolis would be the logical place for the younger practitioner to settle. If, on the contrary, towns of five thousand population are showing the highest net incomes, graduates of medical schools, other things being equal, would tend to locate there. At present the distribution is entirely chance, and

while income is not the only matter to consider it is a major consideration.

The final suggestion of the investigator is as follows: "It seems to me from superficial study that the methods followed by the physicians in purchasing their drugs and other equipment are rather wasteful. Unnecessary products are purchased and lie on the shelves of physicians' offices without being used, and too much money is invested by each physician in installing a complete line of drugs. Has there ever been any effort to inaugurate co-operative buying? I realize that local problems might make this difficult, but there always are obstacles in the way of any innovation."

Certainly there is room for thought in the suggestions that have been made, and conditions will continue to grow worse rather than better unless some effort is made to improve conditions. Our own candid opinion is that there must develop more unity and harmony in the profession before anything can be accomplished for the profession as a whole. The suspicions, jealousies and contentions that exist in the medical profession in many communities must be largely wiped out and each medical man made to feel that as individuals little can be accomplished, but as a profession much can be accomplished if there is unity of purpose.

THE COST OF HOSPITAL CARE

Concerning the rising cost of hospital care the president-elect of the American College of Surgeons very properly says that it is quite true that modern hospital treatment cannot be afforded at all, or only under great financial stress, by the vast majority of people requiring hospitalization. However, the professional standards of the hospital cannot be lowered, and physicians and surgeons should not be blamed for desiring that the present standards shall continue to exist. The solution of the problem is to give the hospitals financial assistance from some agency such as a community chest or from other sources, the details of which must be worked out by the people themselves. Hospitals that are run on a business basis are as low in costs as possible considering the minimum standards that the medical profession necessarily exacts of hospital administrators. When you consider that ten dollars per day is the minimum charge for room and meals in a hotel on the American plan, and that usually the charge is still more, and then consider that a hospital with its necessary adjunct of nursing department, dressing department, x-ray department, pathological laboratories, diet kitchen, and all the facilities for caring for the sick, gives you a room, food and attention for from six to ten dollars per day, in thoroughly good though not necessarily deluxe hospitals, one can see that hospital charges

are not exorbitant when costs are considered. However, as the president-elect of the American College of Surgeons says, ten dollars per day for a hospital room is a very heavy price for a man of average income to pay, and the only solution for the problem is for the hospital to receive financial aid by endowment, or from sources which will have to be determined after profound consideration and discussion by those outside of the medical profession.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

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Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve you.

ONLY those who have paid their dues for 1930 will receive succeeding issues of THE JOURNAL.

THE January *Survey-Graphic* says, "How shall the doctor be paid?" We will volunteer an answer by saying, "The doctor should be paid adequately and well and not be expected to bear the burden that consistency and reason indicates should be borne by the community."

IF more physicians will have periodic health examinations it would go a long way toward convincing lay persons that they should do likewise. Furthermore, it would go far toward discrediting the old saying that physicians as a class fail to practice what they preach in the matter of keeping the body at the maximum degree of efficiency and physical soundness.

THE report of the Madison County Medical Society as published in this issue of THE JOURNAL is well worth reading. Some of the aims and objects of the Woman's Auxiliary to the State Association are given in a clear and concise manner and it would be well for every physician and his wife to read this report as written by Mrs. M. A. Austin, president of the Woman's Auxiliary to the Indiana State Medical Association.

THE *International Medical Digest* for November, 1929, says that there is indication that many internists are beginning to believe that the restriction of protein in the treatment of renal diseases has been carried to an extreme that is not justified adequately. This is an opinion that has been growing, and seems to be subject to a rational analysis in its favor.

EVERY physician in Indiana should read carefully the special article entitled "No Diphtheria in Indiana in 1930?" which is published on page 143 in this issue of THE JOURNAL. We wish to call particular attention to the fact emphasized by the committee, that "success can be attained only if the entire profession enters whole-heartedly into the fight." Your cooperation is needed!

A READER of THE JOURNAL offers the suggestion that those philanthropists who are so anxious to reduce the cost of illness ought to endow hospitals so that free, or nearly free, services may be rendered to those deserving of such consideration, and let the physician charge as he has in the past. There is no reason why philanthropists should cut the throats of members of the medical profession in efforts to bestow charity.

THE old-fashioned undertaker is now known as a mortician. The beauty parlor operators are scrapping over the question as to whether they are to be called cosmeticians or beauticians. Now come the bootleggers who ask to be called booticians. We shall not be surprised if our janitor insists upon being called the cleanician, and perhaps the elevator girls will derive from the English the term "lifticians". It's a great game if you can stand the price.

SOME clinicians claim that quinine has a strong germicidal action on the pneumococcus and that, therefore, quinine should be good in the treatment of pneumonia. It also is said that patients who are taking quinine are to a certain extent immune to influenza. Many years ago quinine was the sheet anchor of success in the treatment of many fevers of whatever origin. Perhaps the drug which formerly was given empirically will come into its own now through scientific proof of its value.

A TAILOR advertises in the *British Medical Journal* to the effect that he will furnish doctors with clothes on the installment plan, one guinea per month, and that going with the patronage is "free valet service for the care of the customer's clothes after purchase. The garments are collected, brushed, repaired and returned like new."

Ye gods! How we would grab at such a service here in the United States! But then, we understand that our British confreres are poorly paid and need all of the concessions that they can get.

THE graduate nurse and her air of superiority toward the practical nurse have proved too much for the latter, and the snobby public follows the example set. However, there is room and need for thousands of practical nurses with limited train-

ing to care for the general run of cases, and in particular patients undergoing convalescence, and the medical profession should encourage the development of that class of nursing. There is and always will be room for the highly trained graduate nurse, but she is not needed nor can she be afforded in the average case, though that case does need the services of the waiting order instead of the medical order.

Do not accept a check that is dated ahead. If you desire to extend time for the collection of a check, then agree to hold a check up to the time that the giver expects to pay the check, but have the check dated on the day that it is given. This fact was brought forcibly to our attention a few years ago when a patient, well known and presumably financially able to pay his bills, cashed a check that was dated ahead. When due the bank refused payment on the ground that the drawer of the check had no funds. Later an attorney gave it as his opinion that nothing could be done, as the paper given was merely a promissory note and not a check.

CONCERNING the value of using the five senses intelligently as a means of clinical diagnosis, Dr. W. J. Mayo (Staff Proceedings of the Mayo Clinic, December 4, 1929) said that his father considered it much more important to know that the patient passed blood from the bowel than to know the cause of the patient's great-grandmother's death. A criticism of the present-day tendency to fill out voluminous case histories and include in them much non-essential and even worthless information is voiced in the following: "How many times do we see histories so elaborate that we hesitate to use them, and find it easier to take a new history to separate the two-cent pieces from the twenty-dollar gold pieces of diagnostic evidence."

SOME physicians are not very busy professionally, so they spend their spare time in idle gossip, hatching up trouble or unpleasantness for their confreres, and lamenting their own misfortunes, when as a matter of fact they should be spending odd moments in improving themselves mentally and trying to figure out ways and means of making their services more trustworthy and satisfactory to patients. There is nothing that succeeds so well and so quickly as the rendering of efficient and trustworthy services, the cultivation of a friendly and charitable disposition, and at all times the exemplification of genteel conduct. The loafing physician does not succeed in anything, nor does he deserve to succeed.

"ALTHOUGH the obstetrical armamentarium is ever growing in size and in detail, we always

should bear in mind the value of patience, which is such a necessary requisite in the practice of obstetrics as is also the wonder work of Nature whose importance we are loath to acclaim and whose glory we are wont to take unto ourselves. There are those who too speedily resort to artifice for not any other reason than to gain the plaudits of the layman, thus robbing Nature of her glory and crowning themselves with the stolen credit. Except when done solely with the honest motive of baby's or mother's interests in view, such practices as version, Cesarean section, or other operative measures should be condemned."—Heisel, *The Journal of Medicine* (Cincinnati), August, 1929.

SIR WILLIAM OSLER says, "Happy is the man whose reputation is such or whose local habitation is so well known that he needs no sign." He goes on to say that he recognizes three groups of signs, the necessary, the accessory, and the superfluous. Most of the signs of physicians seen in the mid-west and west are loud and vulgar. A simple doorplate is all that is necessary. Anything more is very apt to be considered by eastern confreres as indicating the quack or irregular. The physician should be known by his works and not by the size or elaborateness of his sign or the cut of his clothes. Concerning signs we are reminded of the Dutchman's saying, "Enough is enough, and too much is too much."

CONTRARY to what some authors have said concerning the dangers of overdosage of Vitamin D, Light, Miller and Frey, in the *Journal of Biological Chemistry*, October, 1929, in their study of the effects of an overdosage of Vitamin D, have come to the following conclusions: 1. Excessively large doses of irradiated ergosterol must be administered daily before any ill effects can be noted. 2. Dosages as high as ten thousand times the daily curative dose over a period of six months have no effect on the growth of white rats, and no apparent effect on their body functions. 3. Excessive amounts of Vitamin D cause drainage of mineral constituents from the body with a relatively greater elimination of phosphorus than of calcium. 4. Dosages of ten thousand times the daily curative dose produce anorexia, emaciation, greasy hair, labored breathing, and eventually death.

ARE physicians doing their duty to their patients and to the community unless they actively seek to promote the health of their patients and actively interest their patients in healthful living? That is the question asked by Dr. S. H. Osborne, *Jour. of the A. M. A.*, October 26, 1929. A plea then is made for preventive medicine, and its carrying out in a more energetic and positive

manner than curative medicine. Concerning the welfare clinic, a note of warning is sounded in the following: "The establishment of clinics in a neighborhood through excessive enthusiasm and lack of foresight, may lead to unnecessary friction and an irreparable conflict of opinion. A few seeds of cooperation planted before the clinic is established will be far more productive for the health of the community."

THE Christian Scientists have a strangle hold on the lay press, and in consequence they secure more free newspaper space for spreading their propaganda than all of the other cults combined. We never have understood why the average newspaper owner would publish the idiotic nonsense that so frequently is turned out as copy by the Christian Science Publication Committee of any populous community, but having been visited by Christian Science Committees on a few occasions when we have said unpleasant things about Christian Scientists, we can well understand how some newspaper editors would rather publish copy submitted than face an interview. Anyway, the Christian Scientists have proved that a propaganda can be put over without much expense if the right kind of effort is put forth.

Concerning the means of lowering the cost of illness, it has been suggested in one of our exchanges that hospitals should be built for service and not for show, and that cheap though efficient service can be available in hospitals if the private rooms are cut out and the patients put in wards or in beds that are screened off sufficiently to give some privacy and no special nurses permitted. It sounds well, but the rivalry of patients would to a considerable extent kill such a hospital. The average patient wants not only good doctors and fine hospitals, but is unable and oftentimes unwilling to pay anything for the medical services, so in the end the physicians are left "holding the bag." Furthermore, the very physicians who suffer most as a result of patients in moderate circumstances demanding the best of everything are the very ones who help to encourage extravagance.

THE Better Business Bureau of Rochester, New York, recently has carried in the daily papers a quarter page of display advertising containing a warning concerning magnetic healing apparatus and electric baths which are considered as fraudulent in character if not dangerous. They also say that reputable publications have refused to advertise these devices. We would like to have a photograph of the manager of any better business bureau in Indiana that will go to a like expense in protecting the public against such frauds. Furthermore, while there may be one or two newspapers in the state of Indiana that refuse

to carry such fraudulent and deceptive advertising, such newspapers are few and far between. The reason that the public is not protected from such swindles is because there is not a single better business bureau in the state of Indiana, so far as we know, that lives up to its obligations like the better business bureau in the city of Rochester, New York, where medical frauds are given no more consideration than frauds of other kinds, and all are given the spotlight of publicity.

THE Diphtheria Committee of the Indiana State Medical Association is planning an intensive campaign to eliminate diphtheria in the State of Indiana. Every month there will appear in THE JOURNAL an article on diphtheria sponsored by the Diphtheria Committee. Please read these articles thoroughly. The active support of the entire profession is required for the success of this project.

INDUSTRIAL medicine and surgery eventually will be a specialty of its own. This is indicated by the increasing number of injuries and diseases occurring in connection with our complex industrial life, and the necessity of giving those conditions appropriate attention not only in the interests of the employee but the employer as well. In connection with this thought we notice the announcement to the effect that the New York Postgraduate Medical School and Hospital, and the Reconstruction Hospital of New York City, have been consolidated for the continuance of the purposes of each and more especially for the advancement of traumatic and reconstructive surgery. It is proposed that the merger of these two institutions to develop opportunity for research and teaching in traumatic surgery and industrial diseases, with a view to providing a center in which instruction may be given to surgeons in the most modern methods of caring for injured persons and restoring them for the work of the community. The laboratory facilities provided by the combined equipment will make it possible to investigate with precision the nature and treatment of the increasing number of perplexing conditions growing out of modern industrial life.

TONSILLECTOMY should be performed immediately in cases of acute arthritis, pyelitis, myocarditis, and in all cases of inflammatory reactions in the body caused by a focus of infection in the tonsil after the acute symptoms of the focal inflammation have subsided. The latter point is an important one. A tonsillectomy should not be performed, under any circumstances, while the tonsils are acutely inflamed, because the infection may spread to neighboring tissues and recovery will be much slower even if the patient

should not develop a general septicemia. Tonsillectomy may be performed safely in patients who have acute arthritis caused by focal infection in the tonsil following tonsillitis which has subsided. The very remarkable feature is the promptness with which the symptoms of acute arthritis disappear when this has been done. The operation should be performed under local anesthesia whenever possible. If the technique of the operation is closely followed, it is remarkable how little shock and bleeding will occur, even in the cases of desperately ill patients. When this operative treatment has been carried to completion, the cause of many febrile diseases is done away with, resulting in quick recoveries which would otherwise be long delayed and end, often, in fatalities.—Mann, in the *Texas State Journal of Medicine*. October, 1929.

ERRORS in diet and digestive disturbances are believed by Broeman (*Cincinnati Journal of Medicine*, August, 1929) to be primary factors in the cause of acne. He urges that each case should be studied carefully and every possible etiological factor, such as indigestion, constipation, anemia, etc., be eliminated and treated properly. Avoidance of pie, cake, candy, chocolate and sweets, starches, roast pork, pork chops and other greasy articles of food, and hot bread, biscuits, waffles, griddle cakes, soda fountain drinks, nuts and excessive sours is absolutely essential to cure acne, in his opinion. However, he considers radiotherapy, properly applied, as the most valuable remedy we possess in the treatment of this disease today, and it has changed indifferent results to positive cures in a great majority of patients. X-ray treatment should be carried out by one who is familiar with the use of the x-ray and who is able to keep the dosage below that which will produce an x-ray dermatitis. Ultraviolet light is not considered anywhere near equal to the x-ray in the treatment of acne, and vaccine therapy, so extensively employed a few years ago, now is being used less and less by the great majority of dermatologists. The ordinary stock vaccines give as good results as the autogenous vaccines, and the dosage should be small in the beginning and increased gradually, say from one-third cc. to two cc. twice per week.

To those who think that the individual practice of medicine is going to continue as it has in the past, it would be well to call attention to the fact that on January 1st, of this year, there were one hundred large corporations or companies furnishing life, health and accident insurance for their employees. This means that insurance companies are responsible for the health of the employees, and that means paying the bills of physicians for medical and surgical services, and of course at

the rates fixed by the insurance companies which fees seldom if ever are equal to the fees charged in the individual practice of medicine. Some of the insurance companies already employ physicians on a salary, and the day is not far distant when many of the large companies actually will be practicing medicine on a large scale by employing physicians on salaries and of course exploiting the medical profession for the benefit of the companies. What is being done for employees in the large corporations eventually will be done for people in all walks of life. This seems like a pessimistic prediction, but there is no use in closing our eyes to what seems the inevitable, for there are many physicians who will respond readily to the needs of large insurance companies who desire to furnish a complete medical and surgical service for their policyholders. There may be a few independent practitioners of medicine who will escape the dragnet, but they will be few and far between.

WHILE it no doubt is true that never in the history of medicine has there been so much earnestness and activity in studying and analyzing the work of others as conveyed to us in medical books and periodicals, yet it must be admitted that altogether too many men in the practice of medicine fail to avail themselves of postgraduate teaching, new medical books and current medical literature. A traveling salesman calling on physicians in Indiana has volunteered the information that about one out of three physicians in Indiana shows any interest in medical literature, as evidenced by the scarcity of new books, the undisturbed dust on the old ones, and the absence of current medical periodicals, and if found in the offices they bear mute evidence of being unnoticed by their possessors. Furthermore, proportionately there are more physicians in populous communities, like cities, who pay little or no attention to medical literature, than in the small towns and country districts. A striking but true comment, perhaps, is the observation that the very men who are so backward in keeping abreast of the times and improving themselves, are the ones complaining loudest about the lack of ability and poor ethics on the part of their confreres, and the general difficulty in attaining success. Another observation was to the effect that the busiest men in the medical profession for the most part seem to be the ones that are the most studious, as evidenced by the possession of the latest medical books and the best of current medical journals. We don't care anything about the older men who are in ruts and dying of dry rot, but we would like to encourage the younger men to heed the injunction, "Don't lie down on the job; but keep everlastingly plugging away in an effort to satisfy yourself as well as your patrons concerning your usefulness."

THERE is an almost universal tendency on the part of patients in moderate circumstances to select and even demand hospital accommodations that in point of luxury are not in keeping with the ability of the patient to pay, and of course unnecessary for the proper care of the patient. In discussing this matter, Dr. M. L. Harris, president of the A. M. A., says (*Amer. Med. Assoc. Bulletin*, for November, 1929): "It is quite common for patients to demand high-priced rooms and special service which the nature of their illness does not require and which their financial status does not warrant. Friends of patients frequently interject their demands as to the service that a patient is to receive, and immediately disclaim any responsibility for the same. It is right here that the attending physician who is acquainted with the circumstances should step in and determine the accommodations and the kind and character of the service that the patient needs, and not permit unnecessary bills to be run up which the patient cannot pay and which must be a loss to the hospital. My experience has convinced me that the average person of the middle class who is not overburdened with installment pledges can meet the expenses of an ordinary illness without suffering financial embarrassment, and at the same time have the best of medical and hospital care if he will but honestly make his circumstances known to the physician. Insurance companies are trying to compel physicians to accept reduced fees under the plea that insurance companies always pay, whereas individuals many times do not pay. There is no reason why the hospitals and the medical profession should be called upon to help pay the expenses of caring for cases and thus increase the dividends of insurance companies."

A WELL-TO-DO man, wife and two daughters from out of the state had an automobile accident near one of our Indiana cities. The two daughters were badly crippled and taken to a hospital, but the man and wife went to the best hotel in the city. While at the hospital the two daughters had x-ray pictures, special nurses, and the services of a surgeon. At the end of two weeks the daughters left the hospital, presumably to take dinner with their parents at the hotel, and did not return. Later the father was notified concerning the amount due for bills incurred at the hospital and he denied responsibility because the daughters were over age and both married. Then it was discovered that the husbands of the two girls were practically penniless. Thus the hospital, nurses, and surgeons were left, figuratively speaking, "holding the bag." Similar incidents are not uncommon with hospitals where the injured are rushed in without question and accepted without an agreement on the part of anyone to pay the bills. It is not laxity on the part of hospital man-

agement that permits such an imposition, and to deny admission of the injured to any hospital until some arrangements are made for payment of all bills would bring the wrath of the public down upon the heads of the management of such a hospital. However, there should be some laws protecting hospitals.

IN one of the Indiana cities a man who temporarily was unguarded in his actions drove up to the county poor trustee to secure an order for the free surgical treatment of one of his children, such treatment to be given at the expense of the county. It so happened that a reputable physician learned about the matter and prompted an investigation which later showed that the man not only owned an expensive touring car but that he earned enough money to keep himself supplied with bootleg liquor and to pay dues to several lodges in which he highly prized membership. His invalid wife and children lived like paupers. Through some legal maneuvers the husband and father was brought into court and ordered to pay his family sufficient to provide the comforts of life or be penalized and go to jail.

What a pity it is that some of these spendthrift men who seek and secure gratuitous medical and surgical services for themselves and their families cannot be dragged into court and made to pay their physicians reasonable compensation or pay a penalty of going to jail. Many years ago we knew a spunky though generous and charitable family doctor who had been imposed upon so much by a notorious deadbeat that finally he told the deadbeat that if any bill for professional services was not paid promptly, satisfaction would be taken out of the deadbeat's hide. Some months later, and after the recipient of the services had had ample opportunity to pay a bill, the physician met his patron and carried out the threat by administering a sound thrashing. The amusing feature of the episode was the subsequent result, for within three days several deadbeats in the community found occasion to pay the physician long overdue accounts! We cannot say that we approve of this method of enforcing collection, but we know that we would get a lot of satisfaction in using it occasionally.

IN a paper on the clinical evaluation of drugs, B. E. Irons, in the *Journal of the A. M. A.* of November 16, 1929, offers a merited rebuke to those who follow fads and fancies in medicine, pro-rated as alleged cures or urged as prophylactics of illness on an apprehensive and susceptible public. The diet list is perhaps the most vicious, and at the present time the public is receiving altogether too much half-baked knowledge concerning vitamins, for there is no evidence to prove that the giving of an excess of vitamins is bene-

ficial. The diversified diet of the average home probably affords all the vitamins necessary to health. Concerning yeast, so widely advertised as beneficial for a variety of conditions, Irons says that the results must be considered problematic, and he points out that there is a wide step between scientific demonstration and commercial exploitation. Then there is the eat-more propaganda, with the urge to consume more oranges, lemons, bananas, fruit, apples and other worthy articles of food which from time to time need a greater market outlet. Medically we can approve of each of these foods as useful, but the stressing of this approval as a mass for what in reality is a commercial purpose deludes the public as to the facts and may lead to unfortunate results. Then there are the various glandular substances that are offered for the corrections of glandular deficiencies. Irons says that these mixtures are reminiscent of the concoctions of the middle ages whose value already had come to be questioned by physicians of the sixteenth century. The inference is drawn that physicians as well as public are too apt to give serious attention to advertising and the skillful exploitation of commercialists. A progressive physician will employ only those remedies whose value is supported by well-controlled scientific evidence.

It is explained generally that the Code of Ethics helps the laity more than it helps the medical profession, and yet the editor of the *New England Journal of Medicine* says that the Code of Ethics should be more elastic in meeting the wishes of the patient, particularly as it pertains to a change of doctors or selecting a consultant. The editor says: "It is certainly true that the more independent laymen are taking things gradually into their own hands and hiring whom they please at any time, and why should they not? If a physician cannot retain the confidence of his patient, and finds that the patient wishes to consult another doctor, is it obligatory on other practitioners to refuse the services and force the patient to remain under the care of one who, for various reasons, has failed to inspire confidence? A physician should be actuated by a desire to serve the patient rather than himself, and take the first step in freeing the patient from constraint. Much would be gained by taking such initiative, not only directly by removing the cause of friction among colleagues, but indirectly by restoring confidence in the attitude of the individual physician. It should be recognized that no physician has a mortgage on the ill health of any person, and that the public should be allowed to select medical advisers without fear of censure or criticism of the profession. Furthermore, let it be understood that physicians may treat patients who come voluntarily to him without the expectation of being made aware of

jealousy or envy on the part of other doctors."

That sounds all right, but it doesn't work out well in practice, for if all people feel that they can change doctors at any time, any place, and for any reason, then considerable injustice will be done physicians, particularly when friends or relatives interfere or a convalescing patient changes doctors as an excuse for avoiding the payment of a bill. We once heard an old doctor offer a little sound philosophy on this question, when he said, "If one of my patients wants to leave me and go to another doctor, all he has to do is say so, *pay his bill*, and he is under no further obligation to me and free to go where he wishes, with no ill feeling on my part towards him or the doctor to whom he goes. On the other hand, if a patient desires to leave another doctor and come to me, I insist upon the same arrangement; otherwise I will not take the case. In other words, the arrangement must be open and fair in either case. I will consult with any regular physician in good standing, and no other. I will not lower myself in self esteem by consulting with quacks or irregulars. My ethics are, be charitable, gentlemanly, honest, and at all times rendering my best service, thus following the biblical injunction to do unto others as I would be done by."

MEDICO-LEGAL DEPARTMENT

By ALBERT STUMP

ATTORNEY FOR INDIANA STATE MEDICAL
ASSOCIATION

Question: What is the liability of a surgeon for failure to remove sponges before closing an incision in an operation?

Answer: The duty of a physician or surgeon under a general employment is to exercise that degree of professional learning and skill possessed and exercised by members of the profession generally in good standing practicing in similar localities at the time. He must exercise reasonable care and diligence, that is the care and diligence ordinarily exercised by members of the profession in similar cases under like conditions. Failure to possess and exercise the learning and skill or care and diligence required constitutes negligence. If, in the exercise of the ability and skill, care and diligence required, a sponge might still be left in the incision, the physician would not then be liable at all events for the failure to remove the sponge.

The Indiana Appellate Court, in considering the question, quoted with approval instructions given by the Supreme Court of Oklahoma in a similar case. It also quoted with approval the comment of the Supreme Court on the instruction. The case quoted from is *Cassingham vs. Berry*, 150 Pacific 139, 67 Okla. 134. The surgeon had

performed an operation leaving in the abdominal cavity of his patient a gauze sponge, which later caused the death of the patient. The trial court gave the following instruction:

You are instructed that the defendant was not at any time required to exercise the highest degree of care or diligence in the performance of the operation in question, but the law imposes upon him the duty to use reasonable care; and although you may believe from the evidence in this case that the defendant in the performance of the operation left the sponges in the abdominal cavity of the said Mrs. Ella Jane Cassingham, and that her death was the natural, proximate result thereof, still if you also believe from the evidence that the defendant in the performance of the operation exercised ordinary care in keeping track of the sponges and seeing to it that they were all removed before the incision was closed, your verdict must be for the defendant. And in determining what was ordinary care in this instance, you must take into consideration the necessity for prompt and efficient action upon the part of the defendant in stopping the hemorrhage referred to in the testimony and doing the other things necessary in the performance of the operation, the difficulty of the operation, and all other facts and circumstances in connection therewith as were disclosed by the evidence.

The plaintiff in that case appealed and assigned as error the giving of the foregoing instruction. The Oklahoma Supreme Court said in regard to it:

The plaintiffs say: "The inherent vice in this instruction is the mistake the court made in assuming and inferring as a matter of fact that the defendant could leave the sponges in the abdominal cavity in the exercise of ordinary care. * * * Common sense dictates that leaving the sponges in the abdominal cavity is absolutely and totally inconsistent with the exercise of ordinary care." The doctrine advanced, in this position of the plaintiff, is too exacting for human affairs. It is tantamount to saying that if ordinary care had been used, no mistake could have occurred. It assumes that the exercise of ordinary care would have rendered a human being infallible. And it is a matter of common knowledge, based upon everyday experience, that even in the exercise of the utmost care, all men do make mistakes.

Both the foregoing instruction and the Supreme Court's comment upon it were cited with approval by our Indiana Appellate Court.

Our Appellate Court has also held that whether or not the treatment given by a physician in any case is reasonably prudent and skillful is usually a question for experts. Where the question is one which requires for its correct solution scientific or expert knowledge, it can be answered only by those who have scientific or expert knowledge within that field, and persons without such qualifications are not competent witnesses to testify on such questions.

It is possible, however, that the facts may be of such a character as to enable the jury to find negligence in the treatment of the patient without the aid of expert testimony. That situation would develop where the standards were not such as would be confined to the knowledge of those possessing specialized or professional knowledge in the particular field involved. The standards of care and treatment by which the particular case could be tested, without first establishing such standards by expert evidence, would be those

standards which are within the judicial knowledge of the court. They would be such standards as are universally and generally well known and accepted and taken as the standard without the need of evidence to prove them to be the standards.

DEATH NOTES

FREDERICK W. MOSES, M.D., of Indianapolis, died February 18th, aged seventy-five years. Dr. Moses graduated from the Eclectic Medical College, Cincinnati, in 1893.

GEORGE HUBER, M.D., of Gaston, died February 2nd, aged sixty-two years. Dr. Huber graduated from the Eclectic Medical College of Indiana, Indianapolis, in 1907.

W. L. MAPES, M.D., of West Terre Haute, died February 8th, aged sixty-five years. Dr. Mapes graduated from the Central College of Physicians and Surgeons, Indianapolis, in 1894.

WILLIAM C. WORTHINGTON, M.D., of Indianapolis, died February 4th, aged forty-six years. Dr. Worthington graduated from the University of Nashville, Tennessee, Medical Department, in 1908.

I. E. LAWRENCE, M.D., of Columbia City, died February 14th, aged eighty-four years. Dr. Lawrence was the oldest practicing physician in Whiteley County. He was a graduate of the Bellevue Hospital Medical College, New York, in 1869.

LEWIS C. MILLER, M.D., of Twelve Mile, died February 8th, aged sixty years. Dr. Miller graduated from the University of Michigan Medical School, at Ann Arbor, in 1895. He was a member of the Cass County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

VINCENT SHEPARD, M.D., of Dupont, died February 9th, aged fifty-eight years, following an illness of almost a year. Dr. Shepard graduated from the Medical College of Indiana, Indianapolis, in 1897. He was a member of the Jefferson County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

WESLEY WILSON, M.D., of Newburgh, died January 25th, aged eighty-four years. Dr. Wilson had retired from active practice. He graduated from the Indiana Medical College, Indianapolis, in 1873, and was a member of the Warrick County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

GEORGE W. LAND, M.D., of Rockville, died at

the home of his brother in Marengo, January 22nd. Dr. Land was fifty-two years of age. He was a graduate of the Hospital College of Medicine, Louisville, in 1900, and was a member of the Daviess-Martin County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

WILLIAM E. LYBROOK, M.D., of Young America, died January 30th, aged eighty years. Dr. Lybrook had practiced at Young America for fifty-one years. He was a member of the Cass County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Kentucky School of Medicine, Louisville, in 1879.

NEWS NOTES AND PERSONALS

DR. A. M. MENDENHALL, of Indianapolis, was in Chicago, February 18th and 19th attending the conference on child health and protection.

THE International Society for Crippled Children will hold an annual meeting at the Royal York, Hotel, Toronto, March 17th to 19th.

DR. EDGAR F. KISER, of Indianapolis, presented a paper on "Coronary Disease" before the February 4th meeting of the Muncie Academy of Medicine.

THE February 18th meeting of the Madison County Medical Society was sponsored by the Woman's Auxiliary. A dinner bridge was held at the Grand Hotel.

THE February 25th meeting of the Allen County Medical Society was held in the Wayne Pharmacal Building. Dr. B. W. Rhamy, of Fort Wayne, presented a paper on "Allergy."

THE medical library of the late Dr. G. W. H. Kemper, of Muncie, was presented to the Ball Memorial Hospital by Dr. Arthur T. Kemper, son of the deceased physician. The library includes several hundred volumes, many of which are very rare.

THE Northeastern Indiana Academy of Medicine met at the Gawthrop Hotel, Kendallville, January 30th, for a dinner meeting. Dr. Sumner L. Koch, of Chicago, talked on "Plastic Surgery in General."

THE Northeastern Indiana Academy of Medicine met at the Gawthrop Hotel, Kendallville, February 27th. Following dinner, Dr. Charles A. Elliott, of Chicago, presented a paper on "Treatment of Hepatic Disease."

AT the February 11th meeting of the Muncie

Academy of Medicine, Dr. Will Benedict, of the Mayo Clinic, presented a paper on "The Significance of Transient Blindness." Dr. C. P. Clark, of Indianapolis, led the discussion.

THE Allen County Medical Society held its regular dinner meeting at the Shrine Club House, Fort Wayne, February 18th. Dr. Arthur E. Hertzler, of Halstead, Kansas, presented a paper on "Atypical Types of Toxic Goiter."

THE dedication of the new college building of the Jefferson Medical College, Philadelphia, occurred February 22nd. George B. McClellan, professor of economic history of Princeton University, presented the dedicatory address.

THE February 13th meeting of the Tippecanoe County Medical Society was held in the Purdue Union Building, Lafayette. Prof. B. E. Pontius, of Purdue University, presented a paper on "Some Applications of the Laws of Heredity to Man."

THE United States Civil Service Commission announces open competitive examinations for medical officer, associate medical officer and assistant medical officer. Applications will be rated as received by the Commission at Washington, D. C., until June 30, 1930.

THE February 25th meeting of the Indianapolis Medical Society was held at the Columbia Club. Dr. R. Wesley Scott, of Western Reserve University, Cleveland, Ohio, spoke on "Facts on the Heart—Clinical-Pathological Observations on a Thousand Autopsied Cases."

THE United States Civil Service Commission announces open competitive examinations for trained nurse and trained nurse (psychiatric), applications for which positions must be on file with the Civil Service Commission at Washington, D. C., not later than April 8th. Examinations are to fill vacancies in the Panama Canal Service.

THE United States Civil Service Commission announces open competitive examinations for social worker (psychiatric) and junior social worker, to fill vacancies in the Veterans' Bureau hospitals and in positions requiring similar qualifications throughout the United States. Full information may be secured from the U. S. Civil Service Commission, Washington, D. C.

THE Fifth International Congress of Physiotherapy will be held in Liege, Belgium, from the 14th to the 18th of September, 1930. The chief questions to be considered will concern rheumatism and affections of the central nervous system, belonging to the physiotherapy domain. All requests for information should be addressed to the Secretary-General's Office, 25 Rue Louvrex, Liege.

THE third annual meeting of the Indiana Roentgen Society was held in Indianapolis, February 22nd. Dr. A. B. Moore, of Rochester, Minnesota, addressed the society. Officers for 1930 were elected as follows: President, C. S. Oakman, M.D., Muncie; president-elect, L. A. Smith, M.D., Indianapolis; vice-president, A. C. Holly, M.D., Attica, and secretary-treasurer, J. N. Collins, M. D., Indianapolis.

THE United States Civil Service Commission announces open competitive examination for head social worker (medical) at a salary of \$2,100 per year, applications for which position must be on file with the Commission at Washington, D. C., not later than March 26th. Examination is to fill a vacancy in the United States Public Health Service, Ellis Island, New York, and vacancies occurring in positions requiring similar qualifications.

THE Indianapolis Medical Society held a clinical meeting at the Indiana University Medical School Auditorium February 11th. February 18th, the weekly meeting was held at the Athenæum and papers were presented on "Recklinghausen's Disease" by Norman M. Beatty, and "Post-operative Embolism" by Henry S. Leonard. On February 25th a dinner meeting was held at the Columbia Club.

THE Eastman Teaching Films, Inc., subsidiary of the Eastman Kodak Company, have available for rental or purchase a number of motion picture films on medical subjects which they have produced in cooperation with the American College of Surgeons. The films are intended to aid in the teaching of medicine and surgery and in furthering scientific knowledge. Pamphlets containing descriptions of the motion picture films and rental and sale prices may be secured from the Eastman Teaching Films, Inc., Rochester, New York.

MRS. A. C. CLAUSER, of Delphi, Indiana, president of the Woman's Auxiliary to the Carroll County Medical Society, has been reappointed state organizer of the Auxiliary for 1930. Mrs. Clauser is an authority on a number of current problems, and is active in many lines of local club work. Mrs. Clauser's services are available upon the request of any medical society, to meet with the wives of physicians and explain to them the purposes of the Woman's Auxiliary. No effort is, or will be, made to form an auxiliary in any community or county except on the request of the physicians and their wives in that county, but it is believed that with a better understanding of the field work of the Auxiliary the membership will become a factor of importance in all health

matters. Requests for information concerning Auxiliary organization matters should be addressed to Mary Lewis Clauser, 226 North Street, Delphi, Indiana, or Mrs. M. A. Austin, 238 West Twelfth Street, Anderson, Indiana.

THE American Commission of the International Hygiene Congresses invites representation from the Indiana State Medical Association at the world health sessions which will be held in Dresden, May 15th to September 30th, 1930. As members of the American delegation, any representatives will meet with over 200 scientific associations which have made their annual conventions converge in Dresden this summer. They will meet with delegates of the League of Nations and twenty foreign governments whose participation in the Dresden meeting has been specified by legislative enactment. En route to Dresden by sea, they will participate in a postgraduate course of round table discussions. It has been made possible to cover all expenses of a membership in the delegation for an inclusive price of \$774, which sum will cover all costs of a more than seven weeks itinerary, including even such miscellaneous items as tips and entrance fees to public museums. Complete information may be obtained from the American Headquarters of the International Hygiene Congresses, 393 Seventh Avenue, New York City.

IN addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories:

Butesin Picrate Eye Ointment.

Lakeside Laboratories, Inc.:

Ampoules Dextrose (d-Glucose) 10 Gm., 20 cc.

Ampoule No. 51 Sodium Cacodylate 0.243 Gm. (3¾ grains), 5 cc.

H. K. Mulford Co.:

Pneumococcus Antibody Solution, Types I, II and III Combined-Mulford, four 50 cc. double-ended vials.

The following articles have been exempted and included with the List of Exempted Medicinal Articles (New and Nonofficial Remedies, 1929, p. 481):

Davies, Rose & Co., Ltd.:

Pil. Digitalis (Davies, Rose).

Kings County Packing Co.:

Sac-A-Rin Brand California Bartlett Pears.

Sac-A-Rin Brand California Tidbits Hawaiian Pineapple.

Sac-A-Rin Brand California Royal Anne Cherries.

Lakeside Laboratories, Inc.:

Ampoule No. 64 Calcium Chloride 10%.

INDIANA UNIVERSITY NEWS NOTES

CHARLES P. SCHNEIDER, of Evansville, a sophomore at Indiana University, has been pledged to Phi Beta Pi, honorary medical fraternity. Donald A. Covault, of Muncie, a junior in the Indiana University School of Medicine, has been pledged to the Phi Chi honorary medical fraternity.

INDIANA UNIVERSITY's forty-first annual summer session will run from June 12th to August 26th. Practically all of the department heads will remain to conduct courses. Attention is called to the excellent opportunity the summer session provides first-year medical students who wish to finish up required work before entering the I. U. medical school at Indianapolis.

THIRTY-TWO Indiana University students, including nineteen under-graduates and thirteen post-graduates, made "A" in all of their work during the first semester of the present school year. Only students who took at least fifteen hours of work are included in the list.

DURING January 1,053 films and 1,055 lantern slide collections were issued by the Indiana University bureau of visual education, including many on the subjects of health. The recent trend has been toward a decrease in the number of entertainment films and an increase in the number of educational films, Hugh W. Norman, head of the visual education bureau, said. More than 300 groups are receiving the services of the bureau.

THE Phi Rho Sigma honorary medical fraternity at Indiana University has pledged the following students of the medical school: Joseph Dudding, of Hope; Robert Wisehart, North Salem; Stanton Bryan, Evansville; and Wendell Anderson, of Mentone.

THE Indiana University board of trustees has awarded the contract for the general construction of a new chemistry building to E. A. Carson, of Indianapolis, whose bid was \$359,763. In addition to the general contract, contracts for heating, ventilating, plumbing, electrical work and elevators were awarded, bringing the total cost of construction up to \$504,463.

DR. CHARLES P. EMERSON, dean of the Indiana University School of Medicine at Indianapolis, spoke at the I. U. extension center in Indianapolis Tuesday, February 25th, on "Emotion as the Cause of Illness." This was the second of a series of extension lectures given by university faculty members on "Science and Man." Pres. W. L. Bryan was the first speaker. Dr. Emerson will speak again on March 4th, on the same topic.

INDIANA UNIVERSITY students have been notified of a prize in the amount of \$3,500 which will be given by the Eugenics Research Association of Cold Springs Harbor, New York, for the best essay submitted by June 1st on the subject of the present decline of the birth rate. Preference will be given to essays which are based upon objective studies rather than on expressions of opinion.

Six hundred and ninety-five students were treated for seventy-one different diseases during January at Indiana University, according to the report issued here by Dr. J. E. P. Holland, University Physician. Three hundred and eighty-four women and 311 men constituted the total number of dispensary calls listed in the report by Dr. Holland. Conferences constituted the largest single item in the report, 180 of the calls being listed under this head. Eighty-eight patients were inoculated for colds and thirty-nine vaccinated for smallpox. No patients were in the university contagious hospital during the month.

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

January 21, 1930.

Meeting called to order at 4:30 p. m.

Present: Wm. N. Wishard, M.D., chairman; Chas. P. Emerson, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held January 14th read and approved.

The release, "Food Fads," read and approved for publication Saturday, February 1st.

Radio release, Saturday, January 25th, "Food Fads."

Speaking engagements:

February 14—Floyd County Medical Society, New Albany. "Cerebro-spinal Meningitis." Speaker obtained.

January 21—Delaware-Blackford County Medical Society, Muncie. "Cerebro-spinal Meningitis." Speaker obtained.

Report of medical meeting:

January 6—Rush County Medical Society, Rushville. "Urinary Antiseptics," "Pyelitis in Children," "Cerebro-spinal Fever."

The Bureau of Publicity, through its secretary, informed the State Board of Medical Registration and Examination that D. T. Sturgis, of Omaha, Nebraska, was giving "clinics" in Indiana to the public showing his Calbro-Magno-Wave electronic apparatus. As a result the State Board has written the following letter to Sturgis:

"Information comes to this office that you are conducting clinics in the office of Dr. H. L. Miller, of Monticello. The records of this office do not show that you have satisfied the state on the question of your qualification and fitness to consult and advise the sick.

"The law provides that any person who performs the functions of a physician must be possessed of a license. You are hereby warned against holding clinics in this state until you have obtained a license so to do."

Article received from the Child Hygiene Division of the Indiana State Board of Health entitled "Point of Attack on Maternal and Infant Mortality Rates." Material was noted by the Bureau of Publicity.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole January 28, 1930.

January 28, 1930.

Meeting called to order at 4:30 p. m.

Present: Chas. P. Emerson, M.D., acting chairman; J. A. MacDonald, M.D., by proxy, and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held January 21st read and approved.

The release, "Carbon Monoxide Gas," read and approved for publication Saturday, February 8th.

Radio release, Saturday, February 1st, "Carbon Monoxide Gas."

Requests for speakers:

February 24—Jefferson County Medical Society, Madison, "Spinal Meningitis." Speaker obtained.

Muncie Academy of Medicine, Muncie. No date specified. "Mental Hygiene." Speaker obtained.

Report of medical meeting:

January 21—Delaware-Blackford County Medical Society, Muncie. "Cerebro-spinal Fever."

Letter received from National Food Bureau, Chicago, Illinois, acknowledging receipt of resolution passed by the Executive Committee in regard to food fads and requesting the Bureau to send it a copy of the release based upon food fads.

Following letter received from the Gary Public Library:

"One of our patrons has just called to our attention the new weekly bulletin issued by your publicity bureau. We are writing to inquire whether this would be valuable for our reference tables. Our patron seemed to think that it would be."

Secretary instructed to place the Gary Public Library upon mailing list.

Attention of the Bureau of Publicity called to the advertisements in the Indiana press concerning the Tricho system of removing superfluous hair. The House of Delegates of the American Medical Association passed the following resolution received from the Section on Dermatology and Syphilology at the annual session of the American Medical Association at Portland, Oregon, in July, 1929:

"WHEREAS, The members of the Section on Dermatology and Syphilology of the American Medical Association are seeing more and more frequently x-ray burns of the skin and some of them serious burns, due to treatment of hypertrichosis, by the tricho system, and by allied systems employing radiation, and

"WHEREAS, The Bureau of Investigation of the American Medical Association has exposed the dangers of this practice, therefore be it

"RESOLVED, By this Association that this method of treatment for hypertrichosis be condemned as highly dangerous to the patient, and be it further

"RESOLVED, That all patients suffering from the effects of this type of treatment and seen by members of the medical profession be reported to the Bureau of Investigation of the American Medical Association."

In the light of this action by the American Medical Association the secretary of the Bureau was instructed to take whatever action that might be feasible concerning advertisements appearing in the local press.

The following letter was received from Jerry H. Service, professor of physics and chemistry, Henderson State Teachers College, Arkadelphia, Arkansas:

"Several years ago your organization issued a pamphlet giving the facts concerning a large number of patent medicines; for example 'Sanatogen' contains nothing more effective medicinally than cottage cheese, etc.

February 13, 1930.

Meeting called to order at 4:30 p. m.

Present; Chas. P. Emerson, M.D., acting chairman; J. A. MacDonald, M.D., by proxy, and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held January 28th read and approved.

The release, "The Common Cold," read and approved for publication Saturday, February 22nd.

The release, "Shock Troops Against Disease," was approved for publication February 15th by the individual members of the Bureau outside of regular committee meeting.

Radio releases:

Saturday, February 8—"Shock Troops Against Disease."

Saturday, February 15—"The Common Cold."

Requests for speakers:

February 12—Tri-County Medical Society, North Vernon, Indiana. "Spinal Meningitis." Speaker obtained.

February 14—Floyd County Medical Society, New Albany, Indiana. "Spinal Meningitis." Speaker obtained.

February 24—Jefferson County Medical Society, Madison, Indiana. "Spinal Meningitis." Speaker obtained.

Report of medical meeting:

February 12—Tri-County Medical Society, North Vernon, Indiana. "Spinal Meningitis."

Letter received from professor of physics and chemistry, Henderson State Teachers' College, Arkadelphia, Arkansas, thanking the committee for referring him to the American Medical Association for pamphlets in regard to patent medicines.

Informal report made by executive secretary in regard to recent meeting and proposed activities of Diphtheria Committee.

Letter received from director of study of the Commission on Medical Education in regard to program of extension education "which may be conducted for practitioners in Indiana," referred to dean of the Indiana University School of Medicine.

The following bills were approved for payment:

| | |
|-------------------------------------|---------|
| W. K. Stewart Company..... | \$ 1.00 |
| A. B. Dick Company..... | 2.50 |
| The Bailey Office Supply..... | 15.00 |
| Central Press Clipping Service..... | 5.00 |
| | <hr/> |
| | \$23.50 |

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole February 18, 1930.

February 18, 1930.

Meeting called to order at 4 p. m.

Present: Chas. P. Emerson, M.D., acting chairman; J. A. MacDonald, M.D., by proxy, and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held February 13th read and approved.

The release, "The Shingles Legend," read and approved for publication Saturday, March 1st.

Radio release Saturday, February 22nd, "The Shingles Legend."

Request for speaker:

March 5—Ripley County Medical Society, Osgood, Indiana. "Spinal Meningitis." Speaker to be obtained.

Reports of medical meetings:

February 12—Tri-County Medical Society, North Vernon, Indiana. "Cerebro-spinal Fever."

February 14—Floyd County Medical Society, New Albany, Indiana. "Spinal Meningitis."

Letters received telling of openings for physicians in the state of Indiana. The secretary was instructed to include these letters in the next bulletin to the county medical society secretaries.

The following letter was received from the vice-president of the American Association for the Study of Goiter:

"The American Association for the Study of Goiter will meet in Seattle July 10th, 11th, and 12th, on Thursday, Friday, and Saturday.

"We are very anxious to place upon our program men from all parts of the country, but as yet have no one from

your state. Could you be so kind as to send me the names of the men in Indiana who are particularly interested in this subject so that I may extend to them an invitation to appear on the program?"

The secretary was instructed to obtain the names of physicians who are interested in this work and send them to the vice-president of this association.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole February 25, 1930.

REPORT OF MEETING OF EXECUTIVE AND DIPHTHERIA COMMITTEES

February 14, 1930.

Subject: DIPHTHERIA PREVENTION CAMPAIGN.

I. Introduction.

A meeting of the Executive and Diphtheria Committees of the Indiana State Medical Association, which was attended by representatives of various groups interested in public health and diphtheria prevention throughout the state, was held at the headquarters office of the State Association on January 25th. Suggestions by Dr. J. H. Stygall, retiring chairman of the Diphtheria Committee, and Dr. Albert E. Bulson, editor of THE JOURNAL, were discussed by the Committee.

Dr. Stygall's suggestion that an anti-diphtheria placard be placed in the office of every physician in Indiana was passed on favorably by the committee, but until the committee receives funds for the composition and distribution of such placards, nothing can be done to carry out Dr. Stygall's plan.

Dr. Bulson's suggestion that we have an intensive campaign such as is going on at the present time in Chicago where all physicians are setting aside certain hours to give toxin-antitoxin was eliminated for the present time because of Dr. Bulson's plan was based on the supposition that the State Board of Health could supply free toxin-antitoxin, and the State Board of Health cannot supply the serum at the present time.

II. Actual Results from Meeting.

Following a free and frank discussion by all those present, the final decision was that the medical profession of the state had to be interested in the diphtheria prevention campaign and the administration of toxin-antitoxin as a routine matter to every child in Indiana. In order to do this the following activities are proposed by the Diphtheria Committee:

Editorials for THE JOURNAL of the Indiana State Medical Association.

Publicity releases, about once a month. Bureau of Publicity, Indiana State Medical Association. News notes in communities where there is more diphtheria than usual.

Monthly report of diphtheria deaths, with the locality by county. This to be a regular feature of THE JOURNAL—if convenient—and to be given a block in a prominent place.

Releases from the Bureau of Publicity, Indiana State Medical Association, to the various radio stations in Indiana and, if possible, adjoining states. Radio talks from Indianapolis stations by Dr. Rice (not a practicing physician) similar in character to the talks he is now giving.

Parent-teacher meetings. Explanation of the plan through the regular organization and by means of talks to local groups.

Indiana State Teachers' Association.

Service club activities—Rotary, Kiwanis, Lions, etc.

State Fair Exhibit by Indiana University School of Medicine.

Organization of the County Medical Societies for Diphtheria Prevention work.

Cooperation of the Public Health Nursing Association.

Assistance from the great insurance companies who sell family insurance—Metropolitan, Prudential, etc.

Assistance to the State Board of Health in arranging health weeks in which diphtheria will be stressed.

The sending out of placards for use in doctors' offices urging parents to have their children immunized.

The use of posters in school and public places.

The assistance of the Anti-tuberculosis organization is asked.

The assistance of the Extension Division of Indiana University.

The cooperation of local newspapers; *Indiana Farmer's Guide*.

The cooperation of County School Superintendents and agricultural agents.

Diphtheria pamphlet of the Indiana State Board of Health for wide distribution.

The publication of the symposium of papers written on diphtheria for THE JOURNAL of the Indiana State Medical Association.

In addition to these activities a series of articles on different phases of the diphtheria problem is planned to appear monthly in THE JOURNAL of the Indiana State Medical Association.

It is planned to save the plates from which these articles are printed and when the series is complete to print them all together as a symposium on the subject to be distributed among the physicians of the state.

Suggestions Solicited. The Committee will welcome suggestions and will appreciate having the names of representative physicians who possibly would help in the preparation of articles.

Diphtheria Committee:

THURMAN B. RICE, M.D., Chairman.

C. S. BOSENBURY, M.D.,

E. R. CARLO, M.D.

MADISON COUNTY MEDICAL SOCIETY

The February meeting of the Madison County Medical Society was, in accordance with those societies having a woman's auxiliary, given to the ladies for their annual party. A dinner-bridge was held at the Grand Hotel and attended by forty members. Those present were the following doctors and their wives: Drs. Hunt and Jones, of Pendleton; Dr. Carpenter, of Alexandria; Drs. Austin, Ayres, Brauchla, Conrad, Erehart, Gante, Knight, Kopp, Metcalf, Stottlemeyer, Tracy, Walton, Wishard, and Zierler, of Anderson; Dr. Mahley, of Summitville. Some high scores were played and suitable prizes won by Mesdames Ayres, Conrad and Tracy, while the men's prizes were won by Drs. Jones, Brauchla and Erehart. Four meetings are held each year, the May, September and November meetings having regular educational programs.

Many women and too many physicians have the wrong idea concerning the field open to doctors' wives through the woman's auxiliary. As a necessary *social* outlet it has little or no reason for existing. As a feeder to any woman's husband's financial betterment, as claimed recently by a doctor, who said, "He didn't need his wife to help him make a living," which only shows his ignorance. The average physician's wife knows too little about the increasing number of fake health cults, health agencies, over-capitalized social service work, and individuals working among all the various woman's clubs and organizations, for two purposes only: their own financial aggrandizement or to boost some new health fad. Every physician's wife should read the health program of the Woman's Auxiliary as announced in the February issue of the INDIANA STATE MEDICAL JOURNAL on pages 105, 106 and 107, and the monthly items in THE JOURNAL concerning the broad field of work that physicians' wives should do whether they have an auxiliary to belong to or not. *The auxiliary is an EDUCATIONAL SCHOOL FOR DOCTORS' WIVES.* Any social affairs connected with it are incidental. Every physician's wife is called upon at all times to serve some organization to which she may belong, as a member of some committee, and most clubs now concern themselves in some manner with local and general problems of health and sanitation. A

physician's wife should always have a place on these committees and should inform herself intelligently to qualify to serve on these committees acceptably, fearlessly and honestly. So-called *freedom for women* in these days is rather a misnomer, for we have unconsciously piled upon ourselves various responsibilities affecting us locally, and through the state and nation. Our viewpoint is no longer confined to the restrictions of the house and the limitations of our children's playground, but we have found that their future health and happiness depend upon the proper consideration of the health and happiness of others. Neglect of others through ignorance or unjustifiable failures may react upon our own homes, our own health problems, and our personal welfare.

The activities of the woman's auxiliary of the various state medical societies are intended to educate its members to meet these problems intelligently. It is probable that the average physician's wife ranks in the community as rather a little better educated and better fitted to give information concerning subjects connected with her husband's field of work as it affects the community problems of health, and she should be able to measure up to these expectations. The INDIANA STATE JOURNAL will have monthly articles covering the field of work of the auxiliary, and these articles should be read by every doctor's wife. Better work can be done by physicians' wives when they get together and consider these problems among themselves through a local branch of the auxiliary. And every physician's wife should help this work along by joining an auxiliary society or help organize one where there is none now, and contribute the small dues required, to further the work as planned by the state and national organization.

MRS. M. A. AUSTIN.

President Indiana State Woman's Auxiliary.

FLOYD COUNTY MEDICAL SOCIETY

February 14, 1930.

The Floyd County Medical Society met in regular session on the above date with Dr. Pierson presiding, and the following members present on roll call: Drs. J. W. Baxter, J. E. Bird, Fred Bierley, George H. Day, William Daniel, W. F. Edwards, H. K. Engleman, W. H. Garner, R. W. Harris, W. A. Hall, W. J. Leach, Anna McKamey, J. Y. McCullough, William Moore, P. R. Pierson, W. H. Ratliff, H. B. Shacklett, W. L. Starr, F. T. Tyler, William Winstandley, and P. H. Schoen.

Minutes of previous meeting read and approved. Several communications of minor importance were read.

The censors reported favorably on the application of Charles W. Stolzer, M.D., whereupon a vote was taken and he was elected to membership. Dr. Stolzer was a former member of the society, but about ten years ago he located in Nashville, Tennessee, and just recently returned to New Albany. We are glad to have Dr. Stolzer with us.

The essayist for the day was E. Roger Smith, M.D., of Indianapolis, who was introduced by the president, Dr. Pierson. Dr. Smith gave a talk on the recent outbreak of cerebro-spinal meningitis in Indianapolis. Dr. Smith covered the subject very thoroughly, telling when the disease was first recognized, and down through various epidemics, at various times, including the recent outbreak this year. He stated that over one hundred strains of bacteria had been isolated, that about sixty were active, that the present outbreak in Indianapolis and Detroit were of type "A." He stated that the present epidemic, like all other epidemics in the past, were more virulent and severe and the mortality was higher in the beginning; that as the disease continued, the mortality became lower. The treatment was along modern lines—"serum," which was administered intra-spinal, intravenously and intramuscularly.

A free discussion followed, after which Dr. Smith closed the discussion, in which he answered a number of questions asked.

P. H. SCHOEN, M.D., Secretary.

ST. JOSEPH COUNTY MEDICAL SOCIETY

February 18, 1930.

The St. Joseph County Medical Society met in the Public Library, South Bend, January 28, 1930, with the president, Doctor Geisler, in the chair.

Dr. L. F. Fisher reported a case of congenital deformity of forearms, showing x-ray pictures of the deformity.

Doctor Knode made further report on the educational campaign to be conducted against diphtheria, giving the worked-out details.

The paper of the evening, entitled "Non-surgical Abdominal Pains in Children," was given by Dr. Milo K. Miller. He brought out the following points:

1. "Colic" in infants more often due to hunger than to any other single cause.
2. "Gastro-enterospasm" due to imbalance of autonomic nervous system. Administration of atropine specific.
3. Other common causes of abdominal pain enumerated and discussed. Among these throat infections, pneumonia, pyelitis, purpura, allergy, presence of foreign body, lead colic, tetany, diabetes, diseases of cardiovascular system, disease of nervous system, true constipation, intestinal parasites, and tubercular glands.

The paper was discussed by Doctors Bosenbury, Knode, M. W. Lyon, Jr., and Allen.

The meeting adjourned at 10:30 p. m.

The St. Joseph County Medical Society met February 4, 1930, Doctor Geisler presiding. An application for membership from Dr. F. W. Beuchner was read and referred to the board of censors.

The paper of the evening, by Dr. L. E. Pennington, was on "The Schizophrenias" (Dementia Praecox).

Abstract of Paper Entitled
"SCHIZOPHRENIAS"
L. E. PENNINGTON, M.D.

The term "dementia praecox" as used by Kraepelin, and "schizophrenia" as used by Bleuler and now adopted by the American Psychiatric Association are the names applied to that mental disease which occurs usually during adolescence but often comes on during later life, and which is characterized by a disintegration or splitting of the personality.

There are four types of schizophrenia: (1) Simple, (2) hebephrenic, (3) catatonic, (4) paranoid.

Etiology: The works of the most prominent authors reveal that ninety percent of all cases of schizophrenia show an hereditary taint. This taint may be traced directly from mental disease (this is most common), excessive use of alcohol or venereal disease in the parents, nervous disease and other physical diseases which tend to lessen the vitality of the parents.

Manic depressive cases often produce schizophrenic children, but schizophrenic parents seldom, if ever, produce manic depressive children; they produce their own kind or some further advanced type of schizophrenia.

Shock, both mental and physical, hemorrhage, infections, and emotional disturbances are the most common exciting causes that precipitate an attack of the disease.

Symptoms: Schizophrenia, as the name implies, is a disease of the mind characterized by a splitting of the personality, disinterest, emotional dullness, delusions, hallucinations, verbiage, mannerisms, negativism, mutism, stereotypy, shut-in manner, complexes and conflicts, with a tendency toward progressive and permanent dementia, but subject to remissions varying in degree and length of time.

Mode of Onset: The disease usually occurs around the period of adolescence but may come on at any time. It may appear suddenly, but frequently there are prodromal symptoms of sleeplessness, headache, digestive disturbances, hallucinations, confusion and disinterest.

The Types:

1. Simple Type:—This is characterized by seclusiveness, disturbing dreams, depression, indifference, shiftlessness and irresponsibility. Early dementia is the rule. Delusions and hallucinations are fleeting if present at all in this type.

2. Hebephrenic Type:—This form is more severe than the simple type and is by far the most common form of the disease. It is apt to be more acute in onset, there is marked emotional dullness, silliness, stereotypy, disinterest, grimacing, verbiage, and there are complexes and conflicts and the splitting of the psyche is deep.

Delusions and hallucinations are prominent. There is withdrawal from reality, resulting in a completely shut-in personality, with resulting deterioration and often total dementia.

3. Catatonic Type:—This form is characterized by inaccessibility, delusions, negativism, hallucinations, impulsiveness, and cataplexy. These patients pass from catatonic stupor to catatonic excitement; being mute, inaccessible, motionless at one time, and noisy, excited and maniacal at another. They are untidy and usually require tube feeding. This form has remissions and probably more recoveries than the other forms.

4. Paranoid Type:—This is characterized by a much more efficient effort at creating a coherent and logically connected series of delusions and associated hallucinations. There is less outward evidence of dilapidation and emotional dullness and dementia. Fixed delusions of persecutions, which when completely worked out by the patient place the blame for all the imaginary wrongs on one person or group of persons, are always present, as are delusions of grandeur. These are essentially wish-fulfilling in nature.

Course and Progress: The catatonic type is more apt to be sudden in onset but has the best chance for recovery; while the hebephrenic and simple types tend toward progressive dementia. The paranoid form usually remains the same without much noticeable dementia.

Diagnosis and Differentiation: Schizophrenia must be differentiated from—

1. Manic depressive psychosis. The former has a more gradual onset, and the presence of anti-social tendencies, emotional dullness, shut-in manner, and disintegration of the personality.

2. Paresis, and other forms of organic psychoses. Serological findings and the presence of organic changes clinch the diagnosis of these diseases.

3. Mental deficiency is differentiated by a thorough anamnesis and psychometric tests. Schizophrenia frequently is engrafted upon a mental deficiency and the presence of hallucinations and delusions usually give a clue to the diagnosis.

4. Epilepsy: Some cases of schizophrenia have epileptiform seizures, but are dominated by psychic disturbances, while epilepsy is dominated by periodical seizures.

5. The psychoneuroses. This group of diseases is characterized by an infantile reaction to life, and the inability to become adjusted at the adult level or reality. These patients are hyper-sensitive, irritable, self-centered, and moody, with poor emotional control. Sexual disturbances color the whole life of the neurasthenic and can be traced to psychic injuries in infancy or childhood. In schizophrenia there is a predominance of delusions and hallucinations, but what really distinguishes hysteria from schizophrenia is the behavior of the emotions. In hysteria there is a heightened susceptibility of the emotional life; in schizophrenia the susceptibility is lowered.

Treatment: This consists of—

A. Physical Treatment:

1. Care of the bowels and bladder.
2. Care of the diet, with feeding.
3. Care of the mouth.
4. Care of the skin.
5. Tonics.
6. Glandular products in some cases.
7. Sedatives occasionally.

B. Mental Treatment:

1. Hydrotherapy.
2. Occupational therapy.
3. Psychotherapy, including a thorough understanding and examination of the psyche.

Discussed by Doctors Hoffman, Sandock, M. W. Lyon, Jr.

Doctor Berteling, secretary of the Board of Health, brought up the need for an isolation hospital in South Bend, or if that were not feasible isolation wards in connection with the two hospitals already established. After thorough discussion it was voted that the secretary of the St. Joseph County Medical Society should write to the Council of South Bend, asking that this matter be considered favorably and immediate steps taken to provide South Bend with proper isolation facilities.

Meeting adjourned at 11:00 p. m.

The St. Joseph County Medical Society met February 11, 1930, in the Public Library with President Geisler in the chair.

Dr. Thomas B. Pauzek was elected to membership by an unanimous vote.

The paper of the evening was read by Dr. St. Claire Darden on "Surgical Treatment of Tuberculosis."

Doctor Darden stated that "the surgical treatment of tuberculosis consists in putting the diseased lung at rest by promoting an artificial pneumothorax by forcing air into the pleura through a relatively small needle and under a measured pressure. In some cases complete collapse cannot be obtained owing to adhesions present. Recently an instrument has been devised by which these adhesions may be seen and cut across by means of a cautery. The symptomatic course is improved markedly by the treatment of artificial collapse of the lungs and many patients are returned to lives of usefulness.

"Pleural effusions in cases of pulmonary tuberculosis, if sterile, should not be removed by aspiration or other means unless they cause marked dyspnea. The effusion acts in keeping the lung in a state of rest."

Doctor Darden's paper was illustrated by many roentgenograms of patients, showing the results of artificial pneumothorax.

The meeting adjourned at 10:15 p. m.

MARTHA BREWER LYON,
Asst. Secretary and Treasurer.

INDIANAPOLIS MEDICAL SOCIETY

February 6, 1930.

The regular meeting of the Indianapolis Medical Society on January 28th was held at the Athenæum at 8:15 p. m. Attendance, 125. Dr. M. Joseph Barry, first vice-president, presided.

The application of Dr. Jesse Martin, assistant superintendent of the City Hospital, was received.

The scientific program was as follows:

"Chronic Sinusitis with Particular Reference to Respiratory Infections"—Dr. J. J. Littell.

"Non-tuberculous Parenchymatous Diseases of the Lungs"—Dr. C. P. Emerson.

This was a very excellent program and emphasized the importance of a careful study of all respiratory infections.

Discussion was by Drs. Alfred Henry, D. O. Kearby, Wm. A. McBride, A. F. Sterne and John R. Carmack.

Sandwiches and coffee were served after the meeting.

The regular meeting of the Indianapolis Medical Society on February 4, 1930, was held at the Athenæum at 8:15 p. m. Attendance, 200. Dr. John A. MacDonald presided.

The applications of Drs. Ratcliff, Rust and Davidson were read for the second time.

The scientific program was a discussion of the epidemic of cerebro-spinal meningitis. Dr. Herman G. Morgan, secretary of the City Board of Health, discussed "History and Epidemiology." Dr. L. D. Carter, of Norways Sanatorium, gave the "Clinical Manifestations and Complications." Dr. E. Roger Smith discussed the "Pathology and Bacteriology," and Dr. L. H. Gilman, who is in direct charge of the meningitis ward at the City Hospital, discussed "Treatment."

This was an unusually interesting program and quite worth while for the general practitioner as there probably will be sporadic cases of meningitis in Indianapolis in the next few months.

On February 25th, at the Columbia Club, Dr. R. Wesley Scott, professor of clinical medicine at the Western Reserve University, will be a guest speaker of the Indianapolis Medical Society. His subject will be "Facts on the Heart; Clinical-Pathological Observations on a Thousand Autopsied Cases." Dr. Scott will discuss the four important causes of heart failure, namely: Acute infections (rheumatism, diphtheria, and sub-acute bacterial endocarditis). Lues: Hypertension and coronary disease.

On March 25th Dr. Samuel Iglauer, of Cincinnati, will speak before the society at a dinner meeting. The title of his paper will be "Bronchography." (Lipiodol and Bromipin) with lantern slides.

All members of the state association are invited to hear these speakers. Reservations should be made in advance, to the secretary.

CHESTER A. STAYTON, M.D.,
Secretary.

INDIANA STATE BOARD OF HEALTH DIVISION OF COMMUNICABLE DISEASES

MONTHLY REPORT, FEBRUARY, 1930

The morbidity reports sent in by the health officers of the state for the four principal diseases, namely, scarlet fever, smallpox, diphtheria and typhoid fever, show an increase over the previous month except smallpox. The name and number of all the transmissible diseases reported from the urban and rural population are shown below.

The urban population includes cities of 2,500 and over, rural all under 2,500 population. Negative disease report cards reported during the month was two hundred eighty.

| Diseases | Total Reported | Urban | Rural |
|------------------------|----------------|-------|-------|
| Tuberculosis | 177 | 112 | 65 |
| Chickenpox | 379 | 278 | 101 |
| Measles | 256 | 166 | 90 |
| Scarlet Fever | 985 | 484 | 501 |
| Smallpox | 807 | 403 | 404 |
| Typhoid Fever | 13 | 10 | 3 |
| Whooping Cough | 125 | 82 | 43 |
| Diphtheria | 146 | 84 | 62 |
| Influenza | 68 | 0 | 68 |
| Pneumonia | 37 | 16 | 21 |
| Mumps | 38 | 22 | 16 |
| Poliomyelitis | 1 | 1 | 0 |
| C. S. Meningitis | 79 | 74 | 5 |
| Undulant Fever | 1 | 1 | 0 |

Smallpox shows a decrease in this disease for the month over last month, when 889 cases were reported. Corresponding month last year reported 226 cases. The estimated expectancy is 383 cases. The estimate is made on the reports for the last seven years.

Chickenpox also shows a decrease in this disease for the month. Last month 484 cases were reported. Corresponding month last year reported 406 cases.

Scarlet Fever is the most prevalent disease reported during the month. This disease increased over last month when 772 cases were reported. The estimated expectancy is 800 cases. Last year reported 861 cases.

Typhoid Fever. Last month eight cases were reported for this disease, which shows an increase for this month. Last year same date reported seven cases.

Diphtheria shows an increase of 36 points as compared with February of last year. Last year reported 110 cases, and last month reported 125 cases.

C. S. Meningitis has dropped for this month. Marion and St. Joseph Counties reported the greatest number of cases for this month, 44 and 11 cases, respectively.

During the month the director investigated an outbreak of smallpox at Argos, Indiana. As many as fifty cases were seen. All of these persons, except about five percent, had been vaccinated, but too late to stay the ravage of the disease. He also assisted the director of the Division of Visual Education in a campaign on the Prevention of Diphtheria in Wabash county schools. During this time the physicians gave the Schick test to several hundred of the school children, teachers, pre-school children and adults. The physicians did this group Schicking for fifty cents per person.

H. W. MCKANE, M.D.,
Collaborating Epidemiologist,
U. S. P. H. Service,
Indiana State Board of Health.

CORRESPONDENCE

CORRECTION AND RETRACTION

February 13, 1930.

Editor THE JOURNAL:

Having been misinformed and not understanding the facts in writing my letter of December 11, 1929, which was published on page 53 of the January, 1930, issue of THE JOURNAL, I wish to say that I was entirely wrong when I stated that Schloss Brothers Investment Company made seventy-eight percent on a note signed by me, and I herewith desire to apologize to them and retract the statements made.

Upon further investigation I find that the Schloss Brothers Investment Company had discounted at eight percent a note of \$70 given to me, payable in monthly installments over a period of a year, and sent a check for \$64.40 in settlement of same. After months of efforts to collect the note, they made a request for me to pay

the balance, which I finally did. Instead of having made eight percent, they lost on the transaction due to the fact that they were not paid as agreed and that so much time was given in efforts to collect the amount. I repeat that I was entirely wrong when I stated that Schloss Brothers Investment Company made seventy-eight percent on a note signed by me, and therefore any such statement made by me which may have done injury to them, I hereby wholly retract.

I sincerely trust that this second letter will reach all who read the first article.

Respectfully submitted,
THOMAS B. NOBLE, JR., M.D.

(EDITOR'S NOTE:—THE JOURNAL wishes to add its apology to the above for having published an erroneous statement. It is the intention of the editor to publish nothing unless it is a statement of proved fact. The letter referred to, printed in the January issue, was thought to be based upon established facts, and the error is deeply regretted.)

BOOK REVIEWS

Books received will be acknowledged in this column. Selections will be made for more extensive review in the interest of readers and as space permits. Further information concerning these books will be supplied on request.

Books received since February 1, 1930:

INSOMNIA AND HOW TO COMBAT IT. By Joseph Collins, M.D. 130 pages. Cloth. Price \$1.50. D. Appleton & Company, New York.

THE BABY'S FIRST TWO YEARS. By Richard M. Smith, A.B., M.D., Sc.D., Assistant Professor of Child Hygiene, Harvard Medical Schools, etc. Illustrated. Revised edition. 159 pages. Cloth. Price \$1.75. Houghton Mifflin Company, Boston and New York, 1930.

RADIUM IN GENERAL PRACTICE. By A. James Larkin, B.Sc., M.D., Radium Consultant on staffs of Wesley Memorial, German Evangelical Deaconess, John B. Murphy Hospitals, Chicago; instructor in Dermatology (Radium), Northwestern University Medical College. 304 pages, with twenty-eight illustrations. Cloth. Price \$6.00. Paul B. Hoeber, Inc., New York, 1929.

SURGICAL DIAGNOSIS. By forty-two American authors. Edited by Evarts A. Graham, M.D., Professor of Surgery, Washington University Medical School. Three octavo volumes, totaling 2,750 pages, containing 1,250 illustrations and separate index volume. Cloth, \$35.00 set. Volumes I and II now ready. Volume III and index volume ready March 15. W. B. Saunders Company, Philadelphia and London, 1930.

SYMPTOMS OF VISCERAL DISEASE. A Study of the Vegetative Nervous System in Its Relationship to Clinical Medicine. By Francis Marion Pottenger, A.M., M.D., LL.D., F.A.C.P., Medical Director, Pottenger Sanatorium, Monrovia, California. Fourth edition, 426 pages with eighty-seven text illustrations and ten color plates. Cloth. Price \$7.50. The C. V. Mosby Company, St. Louis, 1930.

A TEXTBOOK OF PHYSIOLOGY OF NURSES. By William Gay Christian, M.D., Professor of Anatomy, Medical College of Virginia, and Charles C. Haskell, B.A., M.D., Professor of Physiology and Pharmacology, Medical College of Virginia. Second edition, 153 pages, illustrated. Cloth. Price \$2.00. The C. V. Mosby Company, St. Louis, 1929.

TREATMENT IN GENERAL PRACTICE. By Harry Beckman, M.D., Professor of Pharmacology, Marquette University Medical School, Milwaukee, Wisconsin. 899 pages. Cloth. Price \$10.00. W. B. Saunders Company, Philadelphia and London, 1930.

NURSING IN EMERGENCIES. By Jacob K. Berman, A.B., M.D., F.A.C.S., Assistant in Surgery, Indiana University School of Medicine, lecturer to nurses on Nursing in Emergencies in Indianapolis City and Indiana Christ-

ian Hospitals. 160 pages with 109 illustrations. Cloth. Price \$2.25. The C. V. Mosby Company, St. Louis, 1929.

TEXTBOOK ON ORTHOPEDIC SURGERY. By Willis C. Campbell, M.D., F.A.C.S., Professor of Orthopedic Surgery, University of Tennessee, College of Medicine, Memphis. 705 pages, with 507 illustrations. Cloth. Price \$8.50. W. B. Saunders Company, Philadelphia and London, 1930.

GETTING WELL AND STAYING WELL. A book for Tuberculous Patients, Public Health Nurses, and Doctors. By John Potts, M.D., Fort Worth, Texas. Second edition. 221 pages. Cloth. Price \$2.00. C. V. Mosby Company, St. Louis, 1930.

Books reviewed:

MODERN METHODS OF TREATMENT. By Logan Clendenning, M.D., Professor of Clinical Medicine, Lecturer on Therapeutics, Medical Department of the University of Kansas. With chapters on special subjects by H. C. Anderson, M.D., J. B. Cowherd, M.D., and others. Third edition, 815 pages, 95 illustrations. C. V. Mosby & Co., St. Louis, 1929. Price in cloth, \$10.00.

From the temptation to therapeutic nihilism of the past the student is led safely to modern therapeutic practice based on the logical application of pathological physiology. The contagion of the author's enthusiasm makes the book easy to read and removes the tedium of older works on *materia medica*. The chapter on Miscellaneous Procedures is especially valuable and will be most helpful to practitioners more isolated from special consultation. Certain of the chapters are of necessity sketchy, although this is compensated for by wisely selected references largely in English. One cannot but marvel that the author has treated so successfully such a wide range of subjects in one volume, and it is to be hoped that future editions will contain more complete presentation of many of the subjects included.

J. McD.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

DIPHTHERIA TOXOID-NATIONAL.—A diphtheria toxoid (New and Nonofficial Remedies, 1929, p. 368) prepared from seven-day cultures of the diphtheria bacillus that yield a toxin having an L+ dose of not less than 0.25 cc. The toxin is treated with formaldehyde. The finished product is tested for antigenic potency. The product is marketed in packages of three vials (one immunization treatment); in packages of one vial (fifteen immunization treatments); in packages of forty-five vials (fifteen immunization treatments). The National Drug Co., Philadelphia.

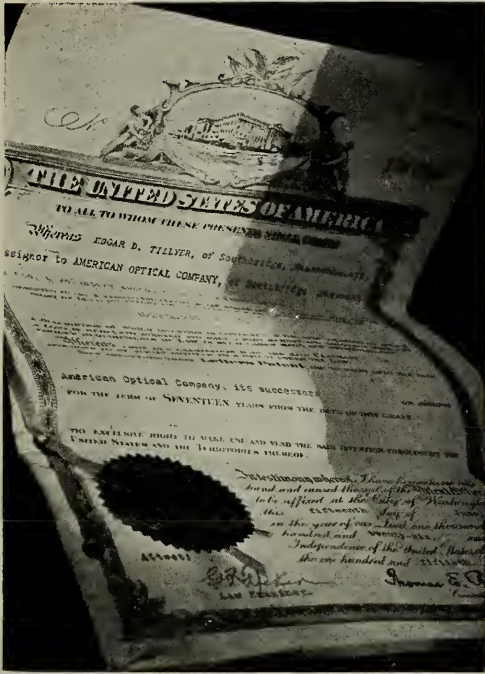
SCARLET FEVER STREPTOCOCCUS ANTITOXIN-CUTTER.—A scarlet fever streptococcus antitoxin (New and Nonofficial Remedies, 1929, p. 350) prepared by the method of Drs. Dick by license of the Scarlet Fever Committee, Inc. It is marketed in packages of one syringe containing 2,000 units, and in packages of one syringe containing 6,000 units. Cutter Laboratory, Berkeley, California.

TYPHO-BACTERIN MIXED (TRIPLE VACCINE TAB).—This product (New and Nonofficial Remedies, 1929, p. 380) is also marketed in packages of thirty one cc. vials, being ten immunizations of three doses each. H. K. Mulford Co., Philadelphia.—(*Jour. A. M. A.*, January 4, 1930, p. 31).

AMPULES SODIUM CACODYLATE-MULFORD, $\frac{3}{4}$ GRAIN, 1 CC.—Each ampule contains sodium cacodylate (New and Nonofficial Remedies, 1929, p. 73) 0.05 Gm. ($\frac{3}{4}$ grain) in 1 cc. of sterile solution, with 1 percent of benzyl alcohol. H. K. Mulford Co., Philadelphia.

AMPULES SODIUM CACODYLATE-MULFORD, 3 GRAINS, 1 CC.—Each ampule contains sodium cacodylate (New and Nonofficial Remedies, 1929, p. 73) 0.2 Gm. (3 grains) in 1 cc. of sterile solution, with 1 percent of benzyl alcohol. H. K. Mulford Co., Philadelphia.

AMPULES SODIUM CACODYLATE-MULFORD, 5 GRAINS, (Continued on adv page xx)



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Tillyer Lenses as novel in conception, ingenious

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(Continued from page 162)

1 CC.—Each ampule contains sodium cacodylate (New and Nonofficial Remedies, 1929, p. 73) 0.32 Gm. (5 grains) in 1 cc. of sterile solution, with 1 percent of benzyl alcohol. H. K. Mulford Co., Philadelphia.

ERYSIPELAS STREPTOCOCCUS ANTITOXIN (CONCENTRATED-MULFORD).—This product (New and Nonofficial Remedies, 1929, p. 349) is also marketed in packages of one 10 cc. syringe containing 500,000 protective units. H. K. Mulford Co., Philadelphia.—(*Jour. A. M. A.*, January 11, 1930, p. 105).

CURDOLAC CASEIN-BRAN IMPROVED FLOUR.—A flour prepared from casein, carbohydrate-free bran, and soya bean, to which leavening and flavoring have been added. It may be used for the preparation of muffins or bread having a comparatively low carbohydrate content and low food value, with bulk. Curdolac Food Co., Waukesha, Wisconsin.

CURDOLAC SOYA-BRAN FLOUR.—A flour prepared from soya bean and a starch-free bran with a leavening mixture. It may be used for the preparation of bread and muffins for use in diets in which a comparatively low carbohydrate content is desired. Curdolac Food Co., Waukesha, Wis.

CURDOLAC BREAKFAST CEREAL.—A medicinal food prepared from soya beans blended with wheat products, including starch-free bran. It may be used as a hot food in diets in which a comparatively low carbohydrate content is desired. Curdolac Food Co., Waukesha, Wis.

CURDOLAC CASEIN COMPOUND.—A flour prepared from casein, vegetable fiber and a leavening mixture to which sodium chloride and gluside are added. It may be used for the preparation of carbohydrate-free bread, muffins, cake, etc., for use in diets in which a relatively low carbohydrate content is desired. Curdolac Food Co., Waukesha, Wis.

CURDOLAC SOYA FLOUR.—A flour prepared from the soy bean. It may be used for the preparation of foods in

diets in which a relatively low carbohydrate content is desired. Curdolac Food Co., Waukesha, Wis.

CURDOLAC WHEAT-SOYA FLOUR.—A flour prepared from soya beans, starch-free bran and a small proportion of wheat, with leavening and flavoring. It may be used for preparation of muffins, cakes, waffles, etc., of well-balanced food value for use in restricted diets. Curdolac Food Co., Waukesha, Wis.

CURDOLAC SOYA-CEREAL JOHNNY CAKE FLOUR.—A flour prepared from soya beans and cereal products to which leavening and flavoring have been added. It may be used in the preparation of muffins, cakes, waffles, etc., for use in diets relatively low in carbohydrate, designed for those who cannot use products made with bran. Curdolac Food Co., Waukesha, Wis.

CURDOLAC SOYA-BRAN BREAKFAST FOOD.—A medicinal food prepared from soya beans and a starch-free bran, to which has been added leavening, flavoring, gluside, and oils without food value. It may be used in diets in which a low carbohydrate content is desired. Curdolac Food Co., Waukesha, Wis.—(*Jour. A. M. A.*, January 18, 1930, p. 185).

PROPAGANDA FOR REFORM

PITUITARY SOLUTION-SQUIBB 1 CC., 5 UNITS, AND PITUITARY SOLUTION-SQUIBB 1 CC., 20 UNITS, NOT ACCEPTABLE FOR N. N. R.—E. R. Squibb & Sons market Pituitary Solution-Squibb 1 cc., 5 units, and Pituitary Solution-Squibb 1 cc., 20 units. The first product is one-half the strength of solution of pituitary-U. S. P., while the second is twice the strength. The Council holds that it is not in the interest of rational therapy to market strengths different from that of the standard pharmacopoeial product and, therefore, cannot give recognition to such preparations. Accordingly, the Council declared these Squibb preparations unacceptable for New and Nonofficial Remedies.—(*Jour. A. M. A.*, January 11, 1930, p. 105).



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ORIGINAL ARTICLES

VOMITING PROBLEMS IN CHILDREN*

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It is not my intention in this paper to attempt to bring out anything new. My purpose is merely to review some of the more common causes of vomiting in infants and children, as I feel there is no more vital subject in pediatrics.

The more common causes, given as nearly as possible as they occur, not in frequency, but in the life cycle of the child are:

1. Distention of the stomach by swallowed air.
2. Too frequent feeding.
3. Too much at a feeding.
4. Gastric irritation due to unsuitable articles of food.
5. Pyloric stenosis.
6. Rumination.
7. Cyclic vomiting.
8. Anhydremia.
9. Intracranial conditions.
10. Acute abdominal conditions; as, appendicitis, intestinal obstruction, etc.
11. Infections.

Swallowed Air and Other Mechanical Causes: Every young infant, even the breast fed, swallows a small amount of air in nursing which remains in the stomach for some time. The only symptom present is a small amount of gas in the stomach which can be removed readily by placing the child over the shoulder and patting on the back until he belches. Air is often swallowed when the child is lying on the back and the bottle is held improperly. In this way the stomach is filled with air, so that when the air is forced out the fluid also is expelled. The finger sucker, as well as the pacifier, or nipple addict, also is an air swallower. Too much handling is a frequent cause of mechanical vomiting. The tight band or tight clothes are causes.

Too Frequent Feeding: This heading speaks for itself, but we have all seen the condition in

which the mother nurses the child every time it cries, just because it cries. We know that these babies always are spitting up some of the undigested milk and the crying, in many instances, is not from hunger, but from distention of the colon. (The hungry baby, while recognized to be an entity, is not the whole thing; there are other causes for crying besides hunger.)

Too Much at a Feeding: The volume taken at a feeding is often greater than the stomach can hold. The quantity of food given need not be gauged by the size of the stomach for most of the fluid passes through the pylorus very quickly. But if the child is fed frequently and vomits regularly after each nursing it is fairly evident that too great a quantity is being given.

Gastric Irritation: The quantity of food depends largely upon its character. As we know, sugar passes very readily through the pylorus, protein more slowly, and fat still more slowly; hence, the foods that are high in fat remain longest. Breast milk passes more readily than cow's milk and can be given in greater quantity. We also know that lactic acid milk, skimmed, or even whole lactic acid milk, will pass through much more rapidly than plain cow's milk. It must also be taken into consideration, when food remains in the stomach a long time, that is, high fat foods, it leaves a food residue present when the next feeding is begun. An excess of sugar as a rule does not cause vomiting in the normal baby, but only after gastro-intestinal indigestion has occurred.

Pyloric Stenosis: Pyloric stenosis is taken in this order because it usually occurs in the early weeks of life, and may even occur shortly after birth. There might be a distinct narrowing from birth. The text books state that it occurs most frequently from the second to the eighth week. The youngest case in our series was the second day after birth. There was a distinct pyloric tumor which was reduced by Ramstedt's operation with prompt recovery.

About ninety percent of our cases have occurred between the third and sixth week. Seventy percent of our cases have occurred in boys. In many instances this condition occurred in a perfectly normal, strong, well-nourished infant. As an example,

*Presented before the Indiana State Medical Association at the Evansville session, September, 1929.

there may be no signs for four weeks after birth, then one attack of vomiting within each twenty-four hours. This vomiting, of course, is forceful. Later the vomiting increases until every second feeding is vomited. Soon after the onset constipation is noticed. "When there is no coal, there can be no ash." Usually there is a rapid loss in weight due to fluid loss or dehydration. The type of vomiting becomes more projectile. The type of food seems to make but little difference except those foods that pass easily through the pylorus are retained better. Too often these infants are weaned from the breast when the trouble is purely mechanical and not dietary. However, as many of you may have noticed, each dietary change sometimes produces temporary improvement.

As to the etiology of the condition, nothing very definite is known except that it is generally the case that it occurs more often in males, is seldom present before the third week, and comes on insidiously. There are two distinct factors that play a part: First, an active hypertrophy, particularly of the circular muscles around the pylorus; the other muscles also play a part. The other factor is spasm of these same muscles; undoubtedly, every case of pyloric stenosis has some hypertrophy, plus spasm. Formerly it was spoken of as pyloric spasm and pyloric stenosis. I do not think this is a good nomenclature, but that medical and surgical pyloric stenosis would be a better term to use. Gautley reports one case in a seven months' fetus. In our series we have one family in which there were two distinct cases of pyloric stenosis. There were only two children born in that family at an interval of two years. We have one other instance where there were five children in the family and two had pyloric stenosis.

In reviewing the literature I find indefinite statements made by others along this same line. Diagnosis is made:

1. From the history and type of vomiting.
2. From the visible gastric peristalsis, moving from left to right.
3. A palpable tumor, usually the size of an olive. Best felt about midway between the ensiform and the umbilicus, about one inch to the right. Failure to palpate this tumor does not necessarily preclude the diagnosis.
4. Constipation is due wholly to starvation.

X-ray, theoretically, should make the diagnosis, but our experience has been that it should have excellent clinical evidence to back it up. It is interesting to give barium and then, under the fluoroscope, see it pass the cardia and enter the stomach freely, ruling out cardiospasm. Also under the fluoroscope one may see the size of the stomach, the amount of gas present, and it may be demonstrated how freely the barium can pass through the pylorus. Though it seems to be conclusive evidence when the barium is out of the stomach in twenty-four hours that we have no pyloric stenosis, unfortunately this is not the case. We have on

record several instances in which the barium passed freely and seemingly a large portion of it fairly promptly, but the child continued vomiting and was relieved only by Rammstedt's operation.

I should say that x-ray is of relative value only in making the diagnosis. There are some objections to x-ray. The first I should mention would be the delay while you are making a twenty-four to thirty-six hour x-ray examination. Generally the pediatrician receives his pyloric stenosis after it has been vomiting for perhaps a week or more. There is often a great loss of weight. The infant is dehydrated. It needs food that it can assimilate and, above all, it needs water. Whether to use the x-ray examination, if good clinical judgment warrants this delay, is a matter to be decided by the individual clinician. Another objection is that often putting the barium into the stomach leaves further residue that is hard to remove. Certainly when barium is put into the stomach it should be washed out thoroughly before any operative procedure.

Now the differential diagnosis: Cardiospasm and esophageal conditions can be eliminated. That food is vomited almost always more or less projectile. In case of doubt the x-ray is of undoubted value.

Vomiting due to infection, either enteral or parenteral. Vomiting due to intestinal putrefaction usually is not projectile, is readily cleared up and does not persist as in stenosis.

Also all atresias of the intestinal tract should be eliminated, as well as retroperitoneal hernias.

As to whether the condition is pyloric spasm or pyloric stenosis is, in my opinion, of no clinical significance. If the case can be handled medically it can be considered a spasm largely; if surgery is necessary, then a stenosis.

Treatment: In speaking of treatment you could not say we have distinct medical or surgical treatment. The medical treatment, of course, would consist of and embrace all methods by which the vomiting could be stopped, and where the child could be given sufficient food to nourish it properly and make it gain in weight. These would consist, of course, in feeding: first, food low in fat, and fairly high in sugar. Also a food should be given that passes readily through the pylorus. Breast milk or the various forms of acidified milk with high sugar would seem to fit these requirements. In addition, both for its nutritional value and also for its mechanical action, a thick cereal paste is of value, as:

- 18 ounces skim milk
- 24 ounces water
- 6 tablespoons Dextro Maltose
- 12 tablespoons Farina
- or
- 32 ounces skim milk
- 10 ounces water
- 4 tablesepoons Dextro Maltose
- 8 tablespoons Farina

Mix Farina and Dextro Maltose together. Add to the boiling water, and let cook three minutes, then add the milk (skimmed, or whole, as directed). Cook in double boiler three hours. Strain. This makes one quart of paste. These pastes are given thick, not diluted. They may be given by means of the "Hygeia" nipple in which the tip has been cut down, or may be given with a spoon, or spatula.

For medical treatment, atropine seems to be the chief anchor, given to the point of full physiological tolerance ten minutes before each feeding. This atropine must be renewed every ten days.

Elevating the head higher than the feet seems to be of some value.

When the child is dehydrated badly, fluids should be given immediately: ten percent glucose subcutaneously, and saline intraperitoneally. If the loss in weight continues, as well as the vomiting, and there is still no evidence of food coming through, then surgical treatment undoubtedly should be instituted.

Marriott made a statement several years ago that perhaps it was better clinical judgment to institute surgery which gives relief in ten days, rather than keep up medical treatment which at the best would promise relief in weeks or months. Both forms of treatment have their ardent advocates, but in our series we have found this to be absolutely true: that the baby who loses one-third of his weight is almost a hopeless risk, either medically or surgically. In our humble opinion the outcome often depends more upon the judgment of the clinician than upon the skill of the surgeon. If the surgeon receives the child too late and there is no vitality, the surgeon is not at fault if the infant dies.

Surgical Treatment: Surgical treatment consists in what is known as Rammstedt's operation: that is, longitudinal incision through the various layers to the mucosa, then allowing the mucosa to pop out through this opening. There have been various modifications: that is, throwing the serous membrane over the mucosa to prevent adhesions. Clinicians show that the straight Rammstedt's is better for all purposes.

Now again medical treatment comes in. Feeding should be instituted almost at once; that is, two hours after the operation. It is our practice to give one-half ounce of water; two hours later, one-half ounce of breast milk. Water and milk are then given alternately every four hours, increasing as rapidly as possible so that the baby gets back upon a normal feeding within seventy-two hours.

Again dehydration is watched and fluids given by other means. Often after operation vomiting again ensues to a slight degree and atropine is of benefit.

Results: Clopton and Hartman: Eighty-one cases; ten died. (But of the last fifty-two cases they have lost only two.)

Strauss, 3.2 percent.

Mixler, 195—9.5 percent.

Bowling and Downs, 454—15 percent. (Lost 130 cases—8.5 percent.)

Rumination: Rumination occurs much more frequently than is recognized. It is seen more often in the infant, although it has been known to occur in older children. The word is taken from the Latin *rumen*, or throat, because of the resemblance of the phenomenon to that occurring in the ruminant, or cud-chewing animals. Some cases appear in perfectly normal infants; usually, there is an underlying neuropathic diatheses. In the older child, or adult, it nearly always means some nervous or mental disorder. It is very commonly found in idiocy. A family history will often elicit a neuroses. This habit may follow simple regurgitation, or vomiting from a diseased process, as pylorospasm, or gastro-intestinal disturbances. Sometimes abnormal air swallowing is the cause of early rumination. The condition may be voluntary or involuntary. Sometimes it occurs during sleep. There are two theories as to the cause; one is that there is no anatomic cause, but the symptom complex is due to a neurosis. Another theory is that there is an existing hyperirritability of the muscles of the stomach and esophagus. Bischoff claims that there is a dilatation of the esophagus near the stomach. In speaking of symptoms, I do not consider the mild type where the food is regurgitated a few times during the day. I speak of the type where the regurgitation progresses and the child shows signs of undernourishment. The case in point, "Baby A," age nine months, gradually lost weight for a period of about three and one-half months. The mother claimed the baby vomited most all the food he took. The mother was a highly nervous individual, almost hysterical in type. The child likewise had two grandmothers who had pronounced ideas on the subject. In vomiting, the child threw its head back and stuck his fists in his mouth. The food usually was not sour when vomited. It had lost something like one-third of its weight since this process was going on. The child was put in the hospital and a nurse was called on the case and the mother taken away. The child was given a normal diet at regular intervals for a child of that age. Thick food was used, as thick cereal paste and food of that nature. A small amount of atropine was given before each feeding. The nurse was told to feed the child a definite quantity, at first, two-thirds of what we would feed a normal child. The child's arms were put in splints so that he could not get his hands in his mouth. The head was put in a cap and the jaws were strapped together. There was considerable fretting at first, but in a very short time the child became quiet. The food within two days was increased to the normal amount and the normal quality for a child of that age. Its gain in weight was very rapid. The stools soon became normal, though at the time of admission he had starvation stools. After about three days the cap was left

off after feeding. The child made little effort to vomit and this gradually stopped after about two days. The splints were kept on. The mother was from out of the city and wanted to go home, so she was allowed to feed the child. Almost with the first feeding the vomiting again started. The child was again put with the nurse and an aunt, who was a sister of the mother, and who seemed to be more of a placid individual, was allowed to come into the room at feeding time. After a couple of days she was allowed to feed the infant and there was no backset at this time. The child was sent home. It has now been several months and the child is almost back to normal. The splints were left on for about two or three weeks after leaving the hospital. There was some attempt to put the hands back in the mouth but this was restricted. However, the mother has not yet been allowed to feed it. I think this case is in somewhat the same category with the one who has no appetite, and is subjected constantly to the neurotic family—the family who plays the radio and make “monkey shines” at the table to get the baby to eat.

Other methods have been used, like the giving of a little quinine after feeding, as the bitter taste may discourage further attempts to vomit. The tonsils, and adenoid removal, makes the swallowing painful, and seems to cause cessation of the habit. Circumcision has been beneficial; however, I merely mention these because they are mentioned in the texts, but I would not recommend either circumcision or tonsillectomy for the cure of rumination.

Cyclic Vomiting: Cyclic vomiting is a condition in which the child vomits almost continuously for one, two or three days and then may follow an interval of freedom of weeks or months, sometimes longer. The condition usually begins between the second and fifth years; as the child becomes older, ordinarily there is an improvement, although I have seen them go past the age of puberty.

Although the condition appears to be gastrointestinal there is a complete temporary derangement of metabolism. Here again there usually is an instability of the nervous system. It occurs more often in the only child and rarely if ever is seen in the dispensary type of practice where the child grew up like “Topsy.” There are numerous theories that this may be cured by correction of ptosis of the abdominal viscera, which leads to the conclusion that physical abnormalities of this sort play a part by interference with normal functions. Focal infections, as appendicitis, tonsillitis, sinusitis, bad teeth also play a part. I think both angles should be considered before an absolute diagnosis as to the cause is made. Certainly all foci of infection should be cleared up. Fat metabolism seems to be the most disturbing. These children do badly on milk. Sugar metabolism seems to be fairly normal. The symptoms are definite, usually a syndrome consisting of lack of appetite, languor,

fatigue, sleeplessness, a few days before the attack. In fact, the mother can tell when an attack is coming on. Most everything is vomited, particularly fluids. The child exhibits marked dehydration, sunken facies, becoming anxious. There usually is no fever during the course, although there is abdominal pain. Often the muscles are sore and constipation develops from lack of food. The urine is sometimes diminished for the same reason; three days to a week is about the longest time. This condition is to be differentiated from the vomiting occurring in other infections and diagnosis can only be made after several attacks. The prognosis is good. No fatal cases have been reported. The outlook is for a complete disappearance of the vomiting at puberty.

As to treatment of the attack, the main object should be to supply the loss of fluids. This may be supplied intraperitoneally, glucose subcutaneously, ice by mouth, carbonated water, sugar given by mouth. Insulin has been recommended, after a large quantity of glucose intravenously. I have never seen any particularly good results from it. Food should be started after the attack subsides somewhat and carbohydrates should be one of the first things added. Milk should be the last thing given.

As to treatment of the underlying cause, I should put first, finding the focus of infection; second, any postural change that could be made. Keep up the general nutrition.

Intracranial Conditions: As to intracranial conditions causing vomiting, I do not think this comes in the scope of this paper other than to mention that they should be kept in mind in making a diagnosis.

Acute Abdominal Conditions (as Appendicitis): Appendicitis is often overlooked in childhood because we do not get the objective symptoms localized as we do in the adult and often, particularly in the young child, may be overlooked entirely. A careful examination is not even made. Vomiting is one of the early symptoms and is often continuous, and associated with rigidity, localizing usually to the right side. Tenderness is difficult to elicit because the child holds its abdomen so rigid. Another thing we have noticed in our practice is the tendency for the appendix not to be in the usual situation. We find it higher than in the adult, often in the region of the navel, and more to the left. A recent case gives the following history: The child became sick on Sunday evening. Had previously cried that the stomach hurt and put the hands high over the abdomen. Vomiting began early. The baby lost rapidly. The child had symptoms resembling a chill and as the bowels had not moved for a day or two, a cathartic, probably calomel, was given. A doctor saw the child the following morning and he said the child was suffering with malaria. Quinine was given. The mother's sister, who was a trained nurse, came to my office the following morning and said the child still complained of pain in the

stomach and vomited all the food given. It was having frequent stools. Temperature was still high. She left for home that evening, some distance away, and 'phoned me that the child looked very bad, that the pain in the stomach had stopped but the child still vomited, retaining virtually nothing by mouth. The following day the child was brought to Memphis, the fourth day after the initial attack. Physical examination showed an anxious expression, sunken facies, generally dry skin. The abdomen had a board-like feeling. There was no definite tenderness to be elicited either by abdominal or rectal examination. The white count at this time was 20,000 with eighty percent polys. Because of the tenseness of the abdomen it was considered a possible appendicitis. A laparotomy was made showing a ruptured appendix, and the abdomen full of pus. Drainage was instituted, but the child died three or four days later with peritonitis. You can see the first symptom, vomiting, persisted. Appendicitis occasionally occurs in the very young child. It is of special benefit to recognize it early because they do not seem to stand peritonitis as well as older subjects.

Another thing that can be mentioned is intussusception. In this condition there is a frequent desire to evacuate the bowels; there is the large stool which is usually passed with pain and straining, then the bloody, mucus stools, which are the diagnostic points. The vomiting usually comes later and if we wait for this symptom our case is usually in a hopeless condition, especially if we get the so-called fecal type of vomiting.

Anhydremia: The vomiting in anhydremia is supposed to be more or less in the nature of acidosis. I think that the one point particularly to be brought out is that sometimes this may be alkalosis. Ordinarily an alkaline urine rules out acidosis except when associated with nephritis, but an acid urine does not rule out alkalosis when associated with vomiting. In fact, its presence may lend support to this diagnosis.

In the severe type of vomiting which is found in anhydremia, carbon dioxide combining power of the blood, the VanSlyke test should be made. A reading of 50-60 in a child is normal; 40 or below indicates acidosis. Other tests that might be made are CO_2 determination of expired air, or the base chlorides.

The method of treatment, of course, is to supply fluids. Again intraperitoneal injection, or in the severe type twenty percent glucose is given in the vein, or ten percent glucose under the skin. One of the simple methods, after we determine that we are not dealing with an alkalosis is to give this child a solution of soda, either by lavage, by mouth, or intravenously, then complete rest by the stomach for two hours. Then only sugar in the form of fruit juices, as orange juice, or pineapple juice, solution of Dextrose, or carbonated water and stick candy. As soon as this is tolerated plenty of water may be given. Carbo-

hydrates should be first fed for a long time, then later on the proteins and last the fats are added. In cases of severe acidosis the use of alkaline intravenously has been advocated. We have had better results from the use of just the Dextrose and plenty of fluids. In alkalosis of the severe type thirty percent CO_2 in O_2 may be given as an inhalation. Five percent calcium chloride into the vein one-half c.c. per kilo or ten percent magnesium sulphate given in two doses, one c.c. per kilo in body weight, fifteen to twenty minutes apart.

The one point I want to bring out is that all severe cases of vomiting in anhydremia and other stomach disorders are not acidosis. The indiscriminate use of alkali without making a diagnosis is bad practice, and sometimes fatal to the patient.

Infections: In our section of the country, from October until May, ninety to ninety-five percent of the intestinal upsets are parenteral in nature; that is, otitis media, tonsillitis, and others of that category. Too often the vomiting is considered as the primary condition. The digestive system of the child is naturally weak and if food is forced upon it with a weak digestion, naturally the child vomits. If the food is cut down some and the underlying condition handled, the vomiting stops. The only reason we speak of it is to make a plea for more careful, general physical diagnosis.

Conclusions: In conclusion, I would like to state that, as I said before, the only purpose of this paper is to attempt to emphasize the fact that vomiting is only a symptom, not a disease. That vomiting in itself cannot be treated any more rationally than we could treat every rash *per se*. That a careful investigation of every vomiting case should be made and put in the proper category before treatment is instituted.

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NONTUBERCULOUS DISEASES OF THE LUNG TISSUE*

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Nontuberculous diseases of the lung, often called "pulmonary pseudotuberculosis," have, during the past twenty-five years, attracted more and more attention. Under this term we include all chronic pulmonary infections which, because of weeks of afternoon fever, cough, and sputum often blood stained, strongly suggest tuberculosis, but which are not due to *Bacillus tuberculosis*. Two or three decades ago these conditions were generally, and now often are, diagnosed as pulmonary tuberculosis.

*Presented before the Indianapolis Medical Society, January 28, 1930.

The diagnosis of pulmonary tuberculosis today would seem to be not nearly as easy as we thought it was twenty-five years ago. In 1905 one of the staff of a special dispensary for tuberculosis boasted "that he had made the earliest diagnosis yet made in that dispensary." "Today," said he, "on my first examination I heard under the left clavicle one clicking rale after the first long breath following the first cough, and she goes to Colorado next week." She went. I presume she had pulmonary tuberculosis. Just ten years later we sent to Saranac a lady who had afternoon fever, rapid pulse, loss of weight and strength, and fairly low blood pressure. The best x-ray laboratory found at one apex a shadow "very suggestive of tuberculosis" while the best clinical laboratory reported on one occasion that her sputum was "positive for *Bacillus tuberculosis*." She was kept at Saranac for eighteen months, the first six months continuously in bed, and then sent home with the then very disquieting statement that "they were not yet quite certain whether or not she had had pulmonary tuberculosis." I now am sure that she had not. These cases are today the problem of the sanatorium staffs. What should they do with a patient who comes reconciled and with all plans made to spend one or two years for tuberculosis after they find that the case is one of latent subacute sinusitis? Keep her one or two years to protect the family doctor?

As an introduction to our following remarks we would remind you that tuberculosis of the lungs in the infant begins within the lung tissue itself, often near the periphery, and usually of the lower lobe, and extends along the lymphatics toward the hilum, soon involving the tracheobronchial lymph glands, which later become calcified. The later pulmonary lesions of tuberculosis, on the other hand, practically all begin at the apex and progress by direct extension downward, towards, but not always reaching, the hilum. Also, we accept Opie's opinion that all calcified lymph nodes in the hila of the lungs are so because of tuberculosis, although later this infection may be very quiescent, or indeed may have died out. It is the secondary infections of these calcified lymph nodes, which now are really foreign bodies, or at least points of lessened resistance, and of the tissue around them by pyogenic bacteria, which furnish focal infections of great importance. Should a secondary infection cause softening of a calcified lymph node, the calcified mass may be freed as a lung stone, a phenomenon which probably happens much more often than is suspected. True bronchial colic due to a lung stone is relatively rare (although we have had an interesting series), yet many patients when questioned remember one mouthful of sputum which was "gritty." And, finally, we would also remind you of the old and most helpful adage in medicine, that if a lesion of the lung involves the upper lobe one must prove that it is not tuberculosis; while

if it does not involve the upper lobe one must prove that it is.

The first form of pulmonary pseudotuberculosis which we will mention is the "pseudotuberculosis type of unrecognized mitral stenosis." These cases have some shortness of breath, repeated attacks of bronchitis, and often blood-streaked sputum, symptoms due to chronic passive pulmonary congestion. Such congestion is always worse on, or even limited to, the right side. The explanation of this is that the heart lies obliquely in front of the spinal column, its axis extending from above and behind on the right side, down, forward and to the left. When it increases in size its extension towards the left brings it immediately against the chest wall, allowing the left lobe to retreat before it. It causes no pressure against this lung. In its extension backwards and to the right, however, it impinges against the hilum of the right lung, causing definite pressure against the large vessels there. In pure mitral stenosis the heart enlarges only to the right, its dilated right ventricle pressing against that hilum exactly where it can do the most harm. This is the explanation why this passive congestion is always most marked on the right side, and why, also, a hydrothorax due to cardiac trouble is always more in, or is exclusively in, the right pleural cavity. Mitral stenosis is a condition often overlooked, for cases with a mitral orifice scarcely large enough to admit an ordinary lead pencil have passed very rigid examinations without detection. This mistake is easily made since the crescendo thrill is not always present. The point of maximum impulse is in the normal position and, while the impulse and first sound in these latent cases are snapping, no thrill or murmur is felt or heard there. In such a case the snapping quality of the first sound is often overlooked and if so the accentuation of the pulmonic second also may not be noticed. One such patient recently came with a diagnosis of acute miliary pulmonary tuberculosis of the right lung only.

Hemorrhagic infarction of the lung also may cause confusion, for this does not always cause a sudden pleural pain nor dyspnea. The result is cough and bloody sputum. It is well to remember, however, that a pulmonary embolus, even though fairly large, does not always cause an infarction in a normal lung; that previous chronic passive congestion is an almost necessary condition. This is of importance in diagnosis.

Infection of the tracheo-bronchial lymph nodes is a common condition with important results. Undoubtedly many cases which formerly were called early tuberculosis and which responded so rapidly to open-air treatment belonged in this group. These hila infections usually are associated with infections of the upper respiratory tract, and especially of the posterior sinuses, the infection evidently carried from the sinuses by the blood stream to the bronchial mucosa and thence by the bronchial lymphatics to the hilum lymph nodes,

nodes often already calcified by an early tuberculosis. It is the infection of these lymph nodes and the pulmonary tissue near them which explains many attacks of so-called "grippe" or "flu", many of chronic recurring bronchitis, some cases of bronchiectasis, and many of our cases of central pneumonia, a pneumonia which is indicated by the appearance of the patient, his cough, sputum, dyspnea and leucocytosis, but the consolidation of which cannot be demonstrated. This is not a simple pneumonia, due to *Diplococcus pneumoniae*, for that is a surface disease. That is, it is an infection of the alveolar epithelium, which is a surface membrane. In the hilum pneumonia, on the other hand, while there is some exudate in the alveoli, the inflammation involves also the interstitial pulmonary tissue itself. That is, the case is one of pneumonitis. This is why this condition cannot resolve with the speed of a true pneumonia. From these nodes develop also most of the hilum abscesses which may for weeks cause only a latent fever interpreted as due to tuberculosis, until, fortunately, the pus perforates into the bronchus, thus relieving the situation and settling the diagnosis.

Chronic pneumonia, especially that type which develops from the hilum, may simulate fibroid phthisis so markedly that a differential diagnosis is impossible unless one can prove the presence of *Bacillus tuberculosis*. Since in tuberculous cases the sputum often is negative a diagnosis is sometimes impossible. Of this group pulmonary anthracosis may simulate chronic fibroid phthisis so closely that a diagnosis is impossible. The symptoms of a well-marked third-degree case are a gradual loss of strength, shortness of breath, cough and expectoration, and pleurisy. The tendency now, however, is to consider all cases of cirrhosis of the lung in coal miners, glass polishers, potters and quarrymen as nontuberculous unless the clinical findings of the case, especially the sputum examination, rather force a diagnosis of fibroid phthisis. These lesions are always hilal and always bilateral, although not equally so.

Syphilis of the lung should produce pulmonary symptoms similar to tuberculosis, and periodically we do have reports of such cases. The lesion must, however, be exceedingly rare, and is seldom recognized during life. Among the suggestive features are: absence of grave symptoms, a sputum persistently negative for *Bacillus tuberculosis*, the presence in the body of other luetic stigmata, a positive Wassermann test, and response to therapeutic test (Howard). Such symptoms are often identical with those of tuberculosis, especially when the lesion involves the apex of the lung. Should the two diseases be associated in active form the result is an extremely active, acute, and rapidly fatal tuberculosis.

Mould infections of the lung, especially pulmonary aspergillosis, is one of the best-known forms of pseudotuberculosis. Two of our cases had been admitted three or more times to special

sanatoria for tuberculosis. One, a man, was refused a fourth admission on the ground that he was "too advanced a case." That was ten years ago. He still earns his living by daily work in a mill. Such patients often have loss of weight and strength, malaise, an afternoon fever, pleuritic pains and often frank pulmonary hemorrhage, but more often blood-tinged sputum, in which acid-fast bacillus-like forms can be demonstrated. While this condition usually involves the hilum of the lung and radiates from it in bush-like manner, it may, however, involve the apex, and then the diagnosis is very difficult. It is important in diagnosis that the pulmonary symptoms of mould disease—shortness of breath, asthmatic attacks, orthopnea, coughs, etc.—are much more severe than in tuberculosis; that the malaise is much less marked, for the patient who suffers all night is able to work hard the next day; and that the physical signs, especially the multitude of rales, are much more pronounced than in minimal pulmonary tuberculosis, a disease with more malaise, fewer symptoms and disappointingly unconvincing physical signs. In these cases the sputum must be studied while fresh, never dried or stained, the cultures must be made on proper media, and the sputum must be injected into guinea pigs with negative results, for only too often one cannot by morphology or by staining reactions differentiate the acid-fast fragments seen in this sputum from tubercle bacilli.

CONGENITAL ATRESIA OF THE ÆSOPHAGUS*

S. S. ARONSON, M.D.
INDIANAPOLIS

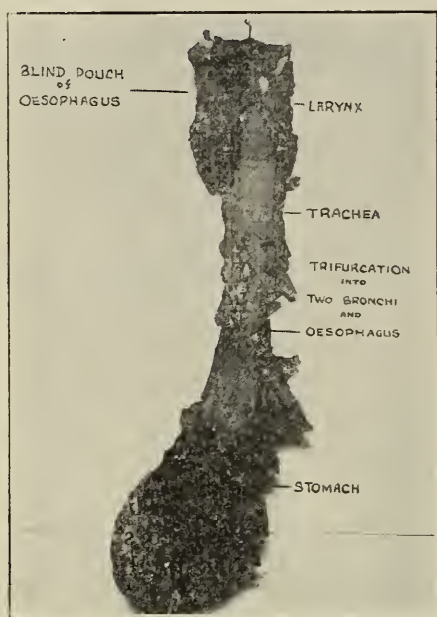
The external visible anomalies of structural development in children are recognized readily and the individuals are a subject of interest to both the public and the physician. The anomalies of the internal organs, while not so spectacular, are equally as interesting. Congenital malformations of the œsophagus are rather rare and of interest both clinically and pathologically. During the past two years a few cases of this condition have been reported, but no doubt more cases have gone unobserved. The following case of atresia of the œsophagus is typical of this group and furnished the basis for a report and a brief review of the literature.

Baby J. N. was the fourth child born to its normal parents. The mother had a normal uneventful pregnancy. During the first twenty-four hours the child appeared to be in splendid condition but did not nurse. During the second day he seemed to have an excess of mucous in the mouth and throat, and became cyanotic upon attempting to nurse. The colostrum would regurgitate from its mouth and nose. The cyanosis at this time would progress to an alarming degree.

*Presented before the Indiana Academy of Ophthalmology and Otolaryngology at the twelfth annual meeting, French Lick, December, 1929.

It was then evident that some pathologic condition existed. Examination of the child showed that the fontanelles were not bulging, there were no palsies, no pathology in the heart or lungs. About every thirty minutes the cyanosis became marked and to relieve this the child was elevated by the feet and the throat stripped of mucous as one does to a new-born babe. This temporarily relieved the condition.

Since the child retained no fluid that was placed in its mouth and was now showing signs of dehydration, lavage was attempted, using a small rubber catheter. The tube, however, became arrested ten centimeters from the gum line. A smaller catheter, a silk bougie, a No. 6 ureteral catheter and finally a whalebone filaform were tried, but neither of these would pass below the original ten centimeters. It was then concluded that the case was one of congenital atresia of the œsophagus. To substantiate this an x-ray plate was taken on the third day. A thin barium mixture was placed in the child's mouth and a picture quickly was taken. This showed a sacculated



pouch ending at the sterno-clavicular articulation. Behind this could be seen two fine streaks of barium extending down to the third rib anteriorly, each line there dividing into several fine branches. These lines were interpreted as outlines of the trachea and bronchi. The stomach appeared as a large air bubble.

A gastrostomy was performed on the fourth day by Dr. W. D. Gatch. The stomach was found empty. With slight difficulty a catheter was passed from the stomach to the mouth, but the child became so cyanotic that the tube had to be withdrawn. A tube was stitched into the gastrostomy opening and through this tube milk was given every two hours, but on the sixth day the child died.

At autopsy the abdominal organs were found disposed normally. The entire gastro-intestinal

tract and respiratory tract were removed *en masse*. The other organs were normal. Both lungs were consolidated and deep purple in color. The upper portion of the œsophagus ended blindly at the bifurcation of the trachea. The trachea, however, instead of bifurcating into two bronchi, trifurcated as it were, into the two bronchi and a third tube which went down into the stomach. Thus we had a congenital atresia of the œsophagus with an additional lower œsophageal tracheal fistula.

Literature: In 1921, Plass, of Johns Hopkins, made a survey of the literature of atresia of the œsophagus and found only 146 verified reported cases. Since then I have read of two more. It usually is stated that the first published case of this anomaly is that recorded by Martin in 1821, but W. Thomas cites a case which was observed in 1696 by Thomas Gibson. Plass was able to verify this reference.

In 1861, Hirschprung reported four cases and collected ten other cases from the literature. Other cases are reported by Mackenzie in 1880, Legrand in 1897, Reuter in 1905, and Happich, Griffith and Lavenson.

By taking advantage of all the published bibliographies, Plass collected 146 cases.

Pathological Anatomy: The cases vary in the minor details, relating to the anomaly, but in general the picture is quite uniform. The upper end of the œsophagus ends in a cul-de-sac at varying distances below the larynx and above the tracheal bifurcation. In seventy-two cases the length of the upper cul-de-sac below the larynx is noted as follows:

| | |
|--------------------------------|----|
| Cul-de-sac 1.0 to 1.9 cm. long | 5 |
| Cul-de-sac 2.0 to 2.9 cm. long | 14 |
| Cul-de-sac 3.0 to 3.9 cm. long | 24 |
| Cul-de-sac 4.0 to 4.9 cm. long | 20 |
| Cul-de-sac 5.0 and over | 9 |

The pouch is usually but not always dilated so that its circumference is somewhat greater than that of the normal œsophagus and its walls are usually hypertrophied. The lower portion leaves the cardia and ascends in its usual position until it enters the trachea at or somewhat above the bifurcation or, more rarely, one or the other bronchus. In ninety-six cases, where the point of entrance into the respiratory tract is noted, we find the following:

| | |
|--|----|
| Opening into a bronchus | 2 |
| Opening into trachea at bifurcation | 33 |
| (Our case is the thirty-fourth.) | |
| Opening into trachea between bifurcation and a point 0.5 cm. above | 33 |
| Opening into trachea from 0.6 to 1.0 cm. above bifurcation | 12 |
| Opening into trachea from 1.1 to 2.0 cm. above bifurcation | 18 |

At its cardial end the œsophagus is usually of normal size, but frequently diminished in caliber as it ascends and enters the trachea by a minute opening. The two portions may or may not be connected by a thin strand of tissue. The trachea!

opening varies in size with the diameter of the upper portion of the lower segment.

Other anomalies of development are frequently present. Their presence or absence was noted in ninety-four cases, and was present in fifty-nine of these. By far the most frequently associated abnormality is atresia ani; it was noted in twenty-four cases. The presence of hydramnios was noted in only nine cases (our case being the tenth), and this condition seems to be a mere coincidence rather than a result of the inability of the fetters to swallow the fluid and eliminate it by blood stream. On the other hand the dilatation and hypertrophy of the upper cul-de-sac are evidences of an attempt to swallow. The logical deduction from these two observations is that normally the quantity of fluid is regulated by absorption through the gastro-intestinal tract, but that, when this fails, absorption takes place through some other channel, or the formation of fluid is checked.

Etiology: It now generally is conceded that the anomaly is due to a developmental error rather than to an intra-uterine inflammatory process, as was at one time believed. It must arise at a very early stage in the development of the fetus, because in 4.0 mm. long embryos the trachea is quite separate from the oesophagus. In the Harvard Embryological Collection there is one 18.1 mm. embryo which shows the abnormality. Some believe that in order to cause both atresia and fistula, a faulty "Anlage" with resultant malformation must have existed. Shattock's widely quoted explanation is as follows: "At the time when the pouch from which the lower air passages develop is formed from the anterior wall of the stomadeum, the posterior wall occasionally participates in the process sufficiently to be drawn forward, thus narrowing the lumen, and when subsequently the lateral pouchings for the formation of the larynx develop from the stomadeum just above this region, so much of the already narrowed lumen is consumed that the connection between the upper and lower portions is left communicating with the air passages." This seems to be the most logical of the numerous explanations offered.

No predisposing factors have been advanced and no two definite cases have been reported in the same family.

Symptoms: The course of events is typical.

1. Asphyxiation at birth, due to mucous in the nose and throat.
2. Choking attacks due to an accumulation of frothy, mucous saliva which cannot be swallowed.
3. Regurgitation of all liquids.
4. Inability to pass even the finest catheter.
5. The stomach inflates with each inspiration.
6. Cyanosis which occurs periodically is quite a constant feature.

There is a progressive loss of weight, frequently accompanied by inanition fever. There is great danger of broncho-pneumonia developing as a result of the aspirated infected material from the mouth. No case has lived over fourteen days.

Sixty percent of the cases died before the sixth day.

As is the case with most congenital anomalies, no treatment has yet been devised that is of any permanent value. The only hope of rational therapy lies in the advance of thoracic surgery. Gastrostomy is absolutely futile as attested by sixteen previous cases. Jejunostomy would be a better procedure, as it obviates back flow through the oesophagus into the trachea.

Summary:

1. Up to July 1, 1929, 146 verified cases of atresia of the oesophagus have been reported in infants.
2. The commonest type is a blind upper sac, a lower sac opening into the trachea above the bifurcation.
3. Accompanying malformations of other parts are common.
4. No treatment is available as yet. The three most extensive recent studies in English of the literature of atresia of the oesophagus are, chronologically: Griffith and Lavenson, 1909; Cantley of London, 1917; and Plass from Johns Hopkins, 1919.

DIPHTHERIA BEFORE ANTITOXIN*

THE DIFFICULTIES ENCOUNTERED IN THE INTRODUCTION OF THE SERUM TREATMENT

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"The little present must not be allowed to elbow the great past out of view."—ANDREW LANG.

In the history of contagious diseases there is no more fascinating chapter than that which deals with diphtheria. The very name—derived from the Greek word *diph-the-ra* ("leather," hence taken in the sense of membrane) suggests antiquity. But long before it was so named, diphtheria was recognized by ancient physicians, and described by them under various names. The student of medical history can well believe that the bacillus of diphtheria claimed its victims back in the Homeric period of Grecian history. Aretæus, celebrated Greek physician and writer in the first century, A. D., depicted the pharyngeal and laryngeal symptoms of the disease. Galen, in describing the Chironian ulcer, stated that the pseudo-membrane was ejected by coughing in the laryngeal form, and by hawking in the pharyngeal type. The centuries that followed were marked by epidemics of the disease in various countries. In 1517 it took its fatal toll in Switzerland, and along the Rhine, and in the Netherlands. Later it crossed to America, and ravaged New England. Here, in 1659, Samuel Dantforth lost four of his eleven children within a fortnight by a "malady of the bladders in the windpipe." In 1765 Dr.

*This paper is the first of a series on diphtheria prevention and treatment to be published under the endorsement of the Diphtheria Prevention Committee of the Indiana State Medical Association.
*Read before the Delaware-Blackford Medical Society, Muncie, March 18, 1930.

Home, in Scotland, started a medical controversy that with true Scottish economy he left for future generations to settle. He claimed that croup and pharyngeal diphtheria were due to different organisms. In 1770 Dr. Samuel Bard, of New York, opposed the theory of Home, and claimed the process was the same wherever located. His observations on diphtheria were very important and accurate. Osler declared that Bard's essay on diphtheria was one of the most solid contributions made to medicine in America.

In 1821 Bretonneau in Paris published his notable first paper on diphtheria, and gave the disease its present name, which means a skin or membrane. His description of the disease was extensive and accurate, and was but little improved by others in the sixty years that followed. This was a period when the medical profession marked time in the management and treatment of diphtheria. A study of the old authors who practiced then leads us to admire their courage and their industry in their struggles against an unknown enemy when they so often faced defeat. All honor to those men of a primitive and heroic age! I would that space permitted the roll call of their names!

Beginning medical practice in Muncie, Indiana, in March, 1890, it was my privilege in practice, and as health officer, to witness and experience some of the difficulties and disasters encountered with diphtheria before the introduction of antitoxin. The uncertainty of diagnosis, and so often the unsatisfactory treatment, made the situation most difficult. While we were sometimes cheered by the recovery of mild cases, yet the menace of paralysis, nephritis and other sequelæ remained to disturb us. In some epidemics the mortality averaged thirty to forty percent, and even higher when laryngeal cases predominated. Those were the days when Doc Busyman stayed up all night with a croupy child, and "pulled it through"—so he claimed—with his much-advertised secret remedy (?). Sad days and nights were those for the little sufferers with grandma's poultices and calomel, and tartar emetic, and lobelia, and *similia similibus curantur*, and specific medication, and corn sweats, and calamus, and vapo-cresolene, and intubation, and tracheotomy.

The well-known picture of the doctor sitting by the dying child, with the sorrowing parents near by, might also be called "*Diphtheria Before Antitoxin*." With the coming of antitoxin the bright harmonious colors of an inspiring glorious picture were forming, making possible a masterpiece to be called "*The Triumph of Antitoxin*."

When antitoxin came, then came the deluge—a deluge of discussion, of offense and defense. The profession was soon divided into two camps—for and against antitoxin. Leaders in the great medical centers took sides, and medical literature was crowded with their views and experiences.

In July, 1895, in an exhaustive report of over

twenty thousand words *The Bulletin of the Johns Hopkins Hospital* reviewed the history of antitoxin, and the methods and results of treatment. Dr. Wm. H. Welch, professor of pathology, who prepared this report, urged the early use of antitoxin as the only avenue of safety in all cases of diphtheria.

Because of an epidemic of diphtheria in Muncie and vicinity in November, 1895, and because of local professional opposition to antitoxin appearing in our newspapers, the writer, then county health officer, reviewed, at considerable length, the report of Dr. Welch, which review also appeared in the local press. Again the professional opposition renewed the newspaper attack, quoting Dr. Hauseman, of Berlin, as reporting that antitoxin causes Bright's disease, and produces blood poisoning; and that Dr. Korte, of Berlin, reported it causes fatal collapse; that Prof. Von Ranke, of Munich, reported the deaths of seven children due to a new form of pneumonia caused by antitoxin, and that of thirty-two children treated thirty died; that Dr. Variot, connected with a large Paris hospital, reported that antitoxin failed constantly in severe cases, and sometimes killed with lightning rapidity; that Dr. Winters, of the Willard Park Hospital, New York City, reported, after widespread experience, the collapse and death of many children treated with antitoxin;—and to sum up the indictment in a sentence, the local doctor declared that "Diphtheria antitoxin is poisoned horses' blood." With such momentum this public debate continued, and many of our local doctors reported their opinions of antitoxin in the public press. In a scrap book the writer has preserved all of these views as published, and after thirty-five years some of them may be classed as medical curiosities. Upon the date November 23, 1895, out of twenty-five of our Muncie doctors who were interviewed, eleven stated that they favored antitoxin, and six of those had used it. Seven were opposed to it, and seven were either non-committal or open to conviction. In view of these diverse professional attitudes it may readily be seen that the introduction of this treatment was not easy. The use of the remedy presented some difficulties. The dose was large and in bottles, and the syringe of formidable size with a large needle. I shall present this first syringe I used to our hospital museum. The administration of antitoxin seemed formidable to the family, and the technique was new to the physician. Unpleasant and sometimes startling rashes developed, suggesting to the credulous some poisonous quality in the serum. However, it is worthy of note that even in the early days of antitoxin the commercial serum was, so far as I can recall, a safe product. In the fall of 1901 the St. Louis Board of Health met with a notable disaster after the administration of their own antitoxin. Twenty cases of tetanus followed the use of their serum, with a mortality of more than fifty percent. *The Journal of the American Medical Association* of November 9, 1901, in an

extensive report by the St. Louis city bacteriologist, stated that the horse from which the antitoxic serum, on August 24, 1901, was taken was quarantined at the poor house stables. Originally he was an ambulance horse and had been injured in the shoulder. He had been used for nearly three years in the production of diphtheria antitoxin. On October 2nd the horse developed tetanus and was killed. On November 18th the coroner rendered a verdict stating that the deaths were due to tetanus toxin in the diphtheria antitoxin administered, thus showing negligence on the part of the Health Department in the preparation and issuance of said diphtheria antitoxin. This deplorable situation resulted in a marked distrust over the country toward antitoxin. Many months and in some places years elapsed before general confidence in the serum was established. From the beginning the prejudice against antitoxin among the laity, fearing or believing that it was a poison, was not easily removed, and required time and patience and education. The professional advocates of antitoxin, and especially the family doctor, gave much time and effort to this problem. But the doctors who championed the cause of antitoxin for several years encountered much opposition. Meeting with diphtheria in a family not ready to consent to the use of antitoxin, we not only recalled our own favorable experiences to them, but we sent them to families where the serum had been successful so that they might be influenced to consent to the treatment.

It took time and experience to determine the dosage of antitoxin. Even as late as March, 1900, at the meeting of the Cincinnati Academy of Medicine a prominent member of the Academy reported a recurrence of diphtheria membrane in a man whom he treated March 6th, injecting 2,000 units of concentrated antitoxin. Twenty-four hours later there was decided improvement, and on March 9th the throat was clear. March 12th the doctor found the case worse, and the right tonsil was covered with membrane. The dose of 2,000 units was repeated and the patient recovered. The profession was slow in learning that the danger in treatment was not in too much, but in too little antitoxin. In the early years of treatment the doses were usually very small, and yet when they were given early in the disease the results often were spectacular and most gratifying. On December 5, 1895, Dr. N. T. Chenoweth, pioneer physician at Windsor, Randolph county, reported to my office a case of diphtheria in a sixteen-year-old girl, and added the following history: "This case I injected with the antitoxin. It had an immediate effect. The membrane stopped forming, and melted away. She did not hardly go to bed. The other case that I injected got along nicely, and is now well, and looks well. Color good, and is a picture of perfect health. The first who was not injected is in a bad condition. Is anæmic, has albuminuria and enlarged liver, and I think that the chances are that she

will die eventually from the sequelæ. Her throat is perfectly well. I would say inject every case at the inception of the disease. No soreness or swelling of any consequence came up at the point of injection. The family is well pleased with the effect of the antitoxin."

In 1883 came the historic and epoch-making report of Klebs, who demonstrated the constant occurrence of peculiar and striking bacilli in the pseudo-membrane of diphtheria. The following year Löffler confirmed the discovery in an extensive report. Later experiments and investigations placed the pathology of diphtheria upon a solid and scientific basis, but years were to lapse before the medical world in general accepted this dictum of the pathologist and bacteriologist. The last decade of the nineteenth century witnessed a keen debate concerning the pathology of diphtheria, and the relation of the diphtheria bacillus to membranous croup. From 1890 to 1900 the mistaken views of many older doctors concerning diphtheria and antitoxin were overthrown by scientific experience. This came not quickly but as a slow evolution. Theodore Potter, M.D., of Indianapolis, writing of this situation, in 1899 declared: "All honor to those who, with painstaking devotion, have gathered the older facts and with keen debate have contended for their mistaken view and interpretation of the truths which they had. They whetted the appetite and sharpened the wits for their successors in the contention. And honor to those who have given to us the new knowledge, by which we from the higher vantage ground gain the better view. We are wiser because they have brought us where we can see farther." Potter's life-work was a distinct contribution to Indiana medicine.

Even among many who pinned their faith to the serum treatment, it seemed almost too good to be true that in antitoxin a new star of the first magnitude had appeared above the medical horizon. Doubters and disbelievers declared it was only a transient meteor, soon to sink into oblivion. But time tested the light of this star. It dispelled the gloom of empiricism and superstition and thrilled the scientific world. Its qualities have dazzled all doubters and disarmed all criticism. It has continued to travel in its unerring orbit, and it has long since established an enviable position in the world of science.

The writer's experience with antitoxin began early in November, 1895, when a severe outbreak of diphtheria appeared in various parts of our county. The mortality without antitoxin was high. Confronted with much opposition, both lay and professional, the serum was introduced. Dr. I. N. Trent gave the first dose in our county, and by November 23rd six of our physicians had used antitoxin. All were favorably impressed. The failure to cure some of the severe cases was usually due to the small doses of 1,000 to 1,500 units given every eighteen to twenty-four hours. Be-

cause of lack of laboratory facilities the diagnosis was determined by the character of the membrane, the glandular involvement, and the systemic disturbance; and in the laryngeal cases by the progressive aphonia, the dyspnoea, the cough, the picture of the patient, and general condition.

In the twenty-four months following October, 1895, it was my privilege to treat, and as health officer to visit, with other physicians, about fifty cases of diphtheria. These experiences are illustrated best by the following case records:

November 12, 1895, I visited cases of diphtheria in the family of C. H., near New Burlington, with Dr. A. H. Good, of Selma. One child, two years old, died of the disease a few minutes after we arrived. Two other children were affected seriously, having had the disease for twenty-four hours. We injected both children, seven and four years, with ten cc. each, of antitoxin. As no other vessel was available we sterilized the syringe by boiling it in a fruit can. Injected on outside of thigh after washing with soap and water. Children recovered. No other injection given.

December 12, 1895, with Dr. A. H. Shively, of Yorktown, saw two cases of diphtheria in the family of R. C. The fourteen-year-old son had been sick one week. Fauces glazed with gray exudate and swollen. Horribly offensive. Exudate also filled nostrils. Heart weak. Gave opinion that he would die. At earnest solicitation of family I injected ten cc. Behring's antitoxin. Boy rallied during the night, but died the next afternoon. In same family girl age six had malignant case of over twenty-four hours standing. Injected ten cc. of antitoxin. Had no more of the remedy with me so was unable to inject other boy, not yet affected. Returned next day. Girl improved, though exudate in throat was present, but whiter. Gave her ten cc. of antitoxin. Also gave boy, age eight, five cc. His throat inflamed. Both recovered.

September 5, 1896. Ten-year-old son of J. K. Moderately ill. Slight exudate upon tonsils. I could not be convinced that it was diphtheria until the third day when the pseudo-membrane spread to pharynx. No antitoxin. Ordinary remedies. Recovered in three weeks with slight paralysis of vocal chords lasting two weeks longer. On November 12th was called to see the six-year-old sister of this boy. Parents alarmed because little girl had a "severe choking spell." Examination revealed the case to be membranous croup (diphtheria). I could see the membrane low in the pharynx. Breathing hurried and obstructed. Returned to city, and procured ten cc. of antitoxin, which I injected. Repeated dose next evening. For three days hoarseness gradually lessened and membrane cleared and child recovered in five days.

September 26, 1896. F. T., age ten, at Cowan, Dr. McKinney attending. Sick one week with pharyngeal diphtheria. Hoarseness and croupy cough had developed in last forty-eight hours.

Voice indistinct, husky and whispering. Child quite restless. Injected ten cc. of antitoxin. Next morning Dr. McKinney gave five cc. and in the evening fifteen cc. Recovered.

November 17, 1896, visited cases of diphtheria with Dr. Dill, of Desota. In family of J. W. S. ten-year-old daughter sick ten days. Pulse rapid, fairly good strength. Fauces glazed, but little membrane. Dr. D. said that the first five or six days membrane was extensive. From about the fourth until the seventh day patient was comatose. Is now listless, lies quiet and speaks rarely, and then fairly distinctly. No antitoxin had been given. Did not advise it. Treatment has been Loeffler's solution and listerine locally and tonics, as Blands. Patient taking more nourishment than usual. Finally recovered, but convalescence slow, and marked by characteristic paralysis. Also with Dr. D. in family of H. S. visited seven-year-old daughter, sick ten days. Considerable membrane in the throat and nostrils. Pulse weak and rapid. No antitoxin used. I advised none. Died next morning.

December 1, 1896, visited four-year-old son of C. S. in Westside. Mother saw membrane in throat day before. Child had been very restless. I found membrane on tonsils and uvula. Gave ten cc. antitoxin. Next afternoon membrane clearing. Child much improved. No more antitoxin given. Recovered.

October 20, 1897. Miss M. P., age seventeen. Diagnosis in doubt. Temperature 102. Tonsils swollen. Exudate on right tonsil. Submaxillary glands enlarged. Next day temperature 104. Membrane massed in throat. Plainly diphtheria. Patient quite restless. Speech and deglutition difficult. Gave 2,000 units of antitoxin in scapular region. At seven a. m. the next day temperature 102. Membrane as before, and throat much swollen, with considerable odor. Gave 2,000 units of antitoxin and in the evening 1,000 units. The next day general improvement, but gave 1,000 units. Recovered.

These case reports reflect a common experience of many physicians during this period. The profession was meeting a hitherto unconquered disease with a new potent and mysterious remedy. Unfortunately, even years later, after overwhelming evidence proved the specific value of antitoxin, there were doctors who were indifferent towards the remedy, or refused to use it.

In a trade journal called *The Gleaner*, dated September, 1927, there is found the following advice: "General Uses of Subculoid Lobelia—Croup. In the treatment of croup in infants, inject ten minims, early. This will often be found sufficient and seldom needs to be repeated. If membranous croup be anticipated, inject twenty minims to a young child and repeat the dose in two hours or more as needed. If a small dose fails to produce results, the symptoms being urgent, the physician should take no chance, but should at once inject a full, single dose (thirty minims).

Heart depression from the remedy has not yet been observed." This writer, Dr. Finley Ellingwood, of Chicago, makes no references here to antitoxin in the treatment of membranous croup.

SPECIAL ARTICLES

INDIANA UNIVERSITY SCHOOL OF MEDICINE

(Seminar, February 28, 1930)

ORTHOPEDICS

A Case of Osteomyelitis.

G. J. GARCEAU, M.D.

Until recent years the treatment of chronic osteomyelitis was made very irksome to the surgeon and painful to the patient by the frequent change of dressings, irrigations with such agents as Carrel-Dakin solution and often the closure of wound with the formation of new sinuses. These difficulties have not been remedied entirely, but in the great majority of cases the so-called Orr treatment of osteomyelitis has simplified the post-operative treatment materially. My intention is not to review the literature on the subject but to present a rather typical result.

The patient, a white boy, age ten years, was first seen at the Riley Hospital in February, 1929, complaining of a draining sinus on the lateral aspect of the middle of the right arm.

He had suffered the usual childhood diseases with good recoveries. Had a tonsillectomy three years before. Otherwise his health had been good. Father, mother, one sister and one brother living and well.

About six weeks before admission he suffered what was called an attack of influenza. A week later he developed severe pain in the right arm followed by swelling of the upper half of the arm. During this period he had high fever. Two weeks following the onset the arm was drained of a large amount of pus by incision. The temperature became lower, but he continued to have fever up to 100 degrees Fahrenheit.

At the time of admission he was pale, anemic, thin and tired very easily. There were enlarged glands in the right axilla and on both sides of the neck. A soft systolic blow was heard over the mitral area. There was a small draining sinus on the lateral aspect of the middle of the right arm. The whole of the humerus could be felt enlarged in diameter and rough on its surface. There was increased heat and tenderness on pressure.

Urine was negative.

W. B. C., 10,400. Sixty-six percent of polymorphonuclears. R. B. C., 3,800,000.

Wassermann was negative.

X-ray report as follows: "Extensive osteomyelitis of the right humerus with sequestrum throughout the whole shaft. Pathological fracture just below the upper epiphyseal line. The entire shaft is sequestering.

The temperature soon became normal and it was thought advisable to wait until sequestration had progressed further before surgery be done. He was, therefore, sent home, but was seen at weekly intervals. An x-ray was taken June 17, 1929, and, under ether anesthesia, sequestrectomy of the right humerus was done. No tourniquet was used and a considerable amount of bleeding was encountered. Through a lateral, curving incision beginning well above the deltoid insertion downwards and curving anteriorly along the brachialis anticus the shaft was exposed. This incision is designed to avoid the radial nerve and superior profunda artery. A wide window as long as necessary was cut rapidly with a chisel and the sequestrum removed in pieces, one piece being four and one-half inches long and the size of the original humerus. The edges of the bone were leveled to make the wound more shallow. Difficulty is met practically always at the ends near the epiphyses, where a ledge is formed. This hinders healing. The wound was packed with well-saturated vaseline gauze and a moderately snug dressing was applied four days later. The post-operative recovery was uneventful and he was furloughed home July 3, 1929. July 24, 1929, the cast was removed on account of a large amount of pus, which had penetrated the cast. Original vaseline dressing was not disturbed.

August 14th, the entire dressing was removed and the wound was found to be filling from the bottom and edges with healthy granulation tissue. Pus obtained from the bottom of the wound was found to have strong bacteriophage activity. New vaseline packing was applied. The wound healed nicely, but continued to drain at the upper end. X-ray showed small sequestra at the extreme upper end of the shaft.

On October 11, 1929, by extending the previous incision upwards, three small sequestra were removed and the wound packed with vaseline gauze. Cast was applied as previously done. Seven days later he was furloughed home. October 30, 1929, the cast was removed, but the vaseline gauze was not disturbed. November 20, 1929, the vaseline gauze was removed. Moderate bacteriophage activity was present. Between November 20th and February 26th the dressing was changed ten times. The wound healed nicely and has become completely epithelialized as you now see it.

To recapitulate: This boy was taken ill slightly over a year ago. When first seen the process was chronic. Operation was delayed until sequestrations and involucrum formation had occurred. Sequestrectomy was done. The wound was packed with vaseline gauze and dressings were changed infrequently. A second operation was necessary because the first operation either was not complete or new sequestra formed. The pus revealed bacteriophage activity.

The essential points in the treatment of chronic osteomyelitis are:

Thorough surgery.

Packing wound with vaseline gauze.

Immobilization.

Infrequent dressings.

It is our opinion at present that the infrequent dressings are most important because the healthy granulation tissues are not disturbed. It allows free drainage around the vaseline, prevents closure of the wound and allows the formation of bacteriophage to occur.

PEDIATRICS

A Case of Bilateral Bronchiectasis and Lung Abscess.

G. BURCH MEHLIN, M.D.

K. M., a boy, eight years of age, was admitted to the Riley Hospital on February 21, 1930, with the complaint of respiratory distress, a very productive cough, intermittent fever and malnutrition. The family history was negative for respiratory infections and tuberculosis except that a sister died of pneumonia following influenza.

Past History: The patient was a full-term normal delivery, breast-fed baby and was considered the healthiest baby in the family until the respiratory condition developed. Since its onset he has had chickenpox, mumps and scarlet fever with good recovery.

Present Illness: The present illness dates back to December, 1923, when the patient contracted measles followed by pneumonia, from which the patient never really has recovered. February, 1924, he had pertussis and since that time has had a chronic productive cough and marked dyspnea. During all of these years he has had to be propped up in bed on his left side in order to sleep. For the past eight months he has been steadily worse with occasional exacerbations of fever.

Examination: Physical examination showed a very poorly developed and markedly emaciated child, eight years of age, weighing fifty-one pounds. He showed definite pallor, was very weak, and had to be propped in bed. When placed flat in bed the patient coughed up three ounces of thin greenish pus. Examination of the head and neck was negative except for moderately enlarged tonsils and anterior and posterior bilateral cervical adenopathy. His breath is very foul and the teeth are careous. The chest is developed poorly with lessened excursion—more marked on the left side and with a tendency towards abdominal breathing. The right chest shows coarse rales throughout with dullness at the base. The left side of the chest gives evidence of a large cavity—best detected posteriorly, where there is increased breath and voice sounds and increased resonance over an area below the angle of the scapula. The remainder of the examination is negative except for marked clubbing of the fingers of both hands.

The *laboratory examinations* were as follows: Urinalysis normal except for a heavy trace of

albumin and 3 to 5 white cells per high power field of the uncentrifuged specimen. R. B. C. 2,600,000, Hgb. sixty percent, W. B. C. 11,000. Differential count of 200 cells: Polynuclear neutrophils, 130; lymphocytes, 64; mononuclears, 4; eosinophiles, 1, and myelocytes, 1. Examination of the sputum was negative for tuberculosis; the yeast and fungus cultures not yet reported. Smears obtained show some streptococci and many gram-negative bacilli which may account for the foul odor. X-ray of the chest shows evidence of multiple cavities in the lower half on the left side with at least one large cavity in the upper portion of this region. Considerable pneumonic thickening surrounds these. In addition there is much evidence of bronchiectatic change at the right of the heart. Right diaphragm is quite high.

Course: Since admission the patient's temperature has run a hectic course, the highest temperature being 104 degrees (R), and a pulse rate of approximately 130. He is propped up in bed day and night and is given postural drainage t. i. d., about three ounces of thin pus obtained each time. Ammonium chloride has been given to loosen up secretions and a high caloric soft diet ordered. A blood transfusion will be done to relieve the anemia. As soon as the physical condition warrants, a bronchoscopic examination with lipiodol instillation will be done to outline definitely the cavities.

The prognosis is doubtful. As yet surgery has not been suggested, but seemingly it is not indicated since both sides are involved. It is probably of too long standing for pneumo-thorax to be of value.

Conclusion: This patient is of interest for several reasons:

(1) It is one of a series of such cases we have found this winter, leading us to believe that lung abscesses and bronchiectasis are often overlooked.

(2) The extreme chronicity is surprising. It is interesting to wonder, if this patient reaches adult life, if he will not be a typical incurable adult type of bronchiectasis which does not respond to treatment.

(3) The physical findings of the chest are unusual. The large cavities in the left side are located at the bifurcation of the trachea and when they are filled with pus this apparently drains over into bronchiectatic areas in the right lung. This can be demonstrated. Before postural drainage the right chest shows definite coarse rales indicative of fluid, which in turn disappear after drainage.

(4) The marked clubbing of the fingers is extreme. It is associated usually with chronic infections of the chest or heart, especially bronchiectasis. This clubbing is not due to any hypertrophy of bone, fat or other tissue, but entirely to a marked turgescence of the blood vessels.

OBSTETRICS

EARL WISEMAN, M.D.

This is the case of a woman, aged twenty-three, admitted to the Coleman Hospital. She was six months pregnant and complained of a twitching of the muscles of the left side. This condition started four weeks ago, in the tips of the fingers. It has become progressively worse so that on admission this patient was jerking considerably. Her left leg and hand, left side of face, and even her tongue was twitching.

Past history: She has had two pregnancies, both normal; her children are five and three years of age. The history is negative until about a year ago, at which time she had attacks of tonsillitis followed by some sort of rheumatism which may have been acute rheumatic fever. However, it was not typical.

Her family history is negative so far as any condition similar to this is concerned. She had no condition similar to this during childhood or adolescence.

On physical examination we found a woman well developed and well nourished. Eyes, ears and nose negative. She has pyorrhea alveolaris, and large, inflamed tonsils. Lungs are normal. Heart sounds are normal except for a slight, soft, systolic murmur. The abdomen is that of a woman approximately six months pregnant; otherwise negative. Her extremities are normal except for the movements you see. Her reflexes are present and practically normal.

The diagnosis of this case is probably chorea gravidarum. Brain tumor has been considered, but not seriously. The etiology may be a toxic condition of pregnancy, or it may be the result of tonsils, teeth, or some focal infection. The prognosis in these cases, according to DeLee, is grave. Twenty to thirty percent of the women and fifty percent of the children do not survive.

The question arises, what shall the subsequent treatment be? Shall we try to carry her to term, hoping this condition will clear up? Shall we try to carry her to near term and do a Cæsarean section? Or should her pregnancy be terminated now?

Since admission she has had rest in bed and has been given rather liberal doses of luminal, and her condition seems to be improved.

MEDICAL CASES

Septicemic-Meningo-Encephalitis.

EDWARD G. BILLINGS, M.D.

For the medical department of the hospitals, I wish to speak about two very "dead" subjects. Dead, but interesting—interesting in that they apparently suffered from the same malady, ran more or less similar courses, died within twenty-four hours of one another; and, finally, yielded two very similar gross specimens to the pathological department. These cases about which I wish

to talk are ones who died with a septicemic-meningo-encephalitis.

The story of the first case is that of a Mrs. G., age forty-eight years, married, and an evangelistic organist by profession. Approximately three weeks prior to admission to the institution she was seized with a sudden severe pain in the back of the neck and fell unconscious from the organ at which she was seated. Between the onset of the ailment and her entrance to the Long Hospital she had a continual headache of more or less severity; a slight convulsion at one time, and a septic temperature.

When admitted to the ward she was crying out with pain. She lay with the knees flexed, head drawn backward, and definitely disoriented to some extent. There was a marked generalized hyperesthesia, most pronounced over the left lower extremity. The abdominal reflexes were sluggish in the lower quadrants, the Achilles reflexes practically absent, the Oppenheim, Gordon and Babinski signs suggestive on the right and double plus on the left. Cheney's and Kernig's signs present. Brudzinski's sign easily elicited, the neck having a "poker-like" rigidity. Cistern puncture brought forth a bloody, turbid fluid under increased pressure. The only laboratory findings of importance were: A meningitic gold curve of the spinal fluid decreased sugar content of the spinal fluid, a cell count 50 to 1,000 per cubic mm. of spinal fluid. No organisms were found in the blood or spinal fluid cultures.

The patient was treated by spinal drainage and anti-meningococcic serum intravenously and intrathecally. The patient died a respiratory death twelve hours after admission.

The second case is that of Mrs. M., age fifty-eight years, married and a housewife. Approximately four weeks prior to her death she complained of pain in the region of the right mastoid which she attributed to the pressure of templet of her spectacle. This continued for three weeks, at the end of which time she had a sudden severe pain in the back of her head. Following this, she had an ever-increasing stiff neck. She entered the hospital on February 13th with subjective and objective findings identical with those of Mrs. G., even to the comparative hyperesthesia and pathological reflexia of the left leg and thigh. Her spinal fluid was similar to that of the first case mentioned and gave similar laboratory reactions. She received anti-meningococcic serum intrathecally and intravenously. She died three days after admission.

The findings at necropsy were identical, so the description of one will suffice for both. On removing the calvarium, the dura appeared hazy, thickened and opaque. There was a diffuse capillary congestion with many areas of capillary hemorrhage in the pia arachnoid. There was also a capillary congestion in the encephalon, as well as other evidences of an encephalitis being present.

Microscopic study of frozen sections of both brains showed definite evidence of inflammation.

In conclusion, I have attempted to give you the story of the clinical course and findings, anti-mortem and postmortem, of two cases—both women of about the same age, in different walks of life, hailing from different sections of the state, stricken in a like manner at about the same time, passing through similar clinical courses of meningo-encephalitis in whom no bacterium could be demonstrated, who died the same type of death within twelve hours of one another, and whose brains at autopsy appeared identical.

We have termed these syndromes septicemic-meningo-encephalitis: septicemic, because of the evident toxicity and "picket fence" temperature; meningitis, because of the marked physical evidences of meningeal irritation; and encephalitis, on account of muscle stiffness anti-mortem and the encephalitis as demonstrated postmortem.

We designated them as being due to the meningococcus for two reasons, viz: (1) no bacteria could be demonstrated; and, (2) for the sake of safety.

SURGICAL CASE

JOSEPH CLEVENGER, M.D.

We are presenting this case from the surgical service to demonstrate that the most common complication of appendectomy done for acute appendicitis, so readily and so easily called peritonitis, is actually intestinal obstruction, and enterostomy when performed early is a life-saving measure. Later the condition may become peritonitis, but the fundamental factor is intestinal obstruction.

This patient, age twenty-three, was admitted to the hospital January 28th with a definite history of an attack of acute appendicitis which had occurred two weeks previously. Temperature was 98, pulse 84 on admission. He did not appear acutely ill and we decided that he was recovering from this attack and that immediate operation was not necessary. Two days later he was operated and, much to our surprise, a gangrenous appendix completely buried in adhesions lying lateral and posterior to the cecum was found. About one ounce of foul-smelling pus was present. The appendix was removed and the cavity drained with five Penrose tube drains. Fluids were given by mouth as soon as the patient had awakened, and intravenously. The temperature was 104 the day following operation, and he appeared to be doing nicely. That evening, however, he began to complain of distention and a colon tube gave no relief. The temperature decreased to 100 degrees, the distention continued and the drainage from the wound stopped. At the end of forty-eight hours enemata were started without relief. Gastric lavage drained only small amounts and gave only temporary relief. These signs were of sufficient omen to place us on guard. On the morning of

the fourth day he began to vomit and the vomiting was definitely intestinal and not stomach contents. The distention and vomiting continued in spite of gastric lavage, enemas and use of the colon tube. Respiration was exceedingly difficult and his color was somewhat cyanotic. The skin, which previously was dry and normal, now became covered with cold perspiration. The temperature rose from a previous high of 100.6 to 103 degrees and persisted. The facial expression showed great anxiety.

On the fifth day an enterostomy of the Witzel type was done under local anesthesia. When the abdomen was opened, the first presenting loop appeared normal, but the loop medial and adjacent was distended and approaching an early gangrenous state, giving all the signs of a mechanical obstruction. When this loop was opened a large amount of very foul-smelling gas escaped and the gut immediately began to assume a more healthy color. The tube which was inserted began to drain before the patient was removed from the operating table. His general condition began to improve at once. He was able to take water without vomiting and the appendiceal wound began to drain this time copiously. Improvement has been consistent since and the patient is now on a regular diet with normal bowel movements. There is still a small amount of drainage from the appendiceal wound.

In conclusion, we wish to repeat that the early condition present in these cases is intestinal obstruction, probably due to localized infection and trauma at the site of operation, and that enterostomy performed early is a safe, simple, and life-saving procedure. Water should be given by mouth early because the obstruction will be detected earlier. The operation should be performed early before the patient begins to show cyanosis, a very leaky skin, marked difficulty in respiration, and other signs of an approaching abdominal catastrophe when perforation and impending peritonitis are then present. A low temperature and poor drainage from the operating wound are early signs of approaching trouble.

PSYCHOLOGIST AND DIAGNOSTICIAN

PRES. WILLIAM LOWE BRYAN

Psychology has been studied by human beings from the beginning no doubt. Indeed the higher animals doubtless study the psychology of other animals. We have scholarly students of psychology at least as far back as Aristotle. He wrote a book on this subject which we still possess.

What is known as experimental psychology began before the middle of the nineteenth century with the studies of such men as Weber, Fechner, Helmholtz and Wundt. Many Americans went to Germany for the study of psychology forty to fifty years ago. In consequence American psychology has for the most part followed the German tradition. William James and Stanley Hall

were influenced by that tradition, but were not dominated by it.

In 1887 when the first psychological laboratory was established in Indiana University there were fewer than a dozen experimental psychologists in the United States. At the International Congress of Psychology held in New Haven last September a thousand psychologists were present, of whom about two-thirds were from the United States.

The subject has developed in so many ways that no man is an authority over the whole field. There have been developed widely different and conflicting theories as to the fundamental principles of psychology. Thus we have the psychology of Freud in one direction; the behaviorism of Watson in another antagonistic direction; the so-called Gestalt psychology, which represents another point of view, and still other conflicting fundamental theories.

Very few persons of any intelligence will doubt the importance of the vast developments in psychology within the past fifty years. Psychologists of distinction have expressed the view that much of the painfully exact experimental work has not led to results of importance.

The German-American psychology has been influenced by the analogy of physics and by the desire for extreme precision. In many instances the work so done proves to be of little or no value because the experimenter, however exact, has not found a vein with pay gold. In respect to one such study William James quoted the lines from Southey:

"'But what good came of it at last?'
Quoth little Peterkin.
'Why, that I cannot tell,' said he;
But 'twas a famous victory'."

I wish to make it clear that I believe fully in the great importance of much that has been done in this field by the methods developed along the line of German-American tradition. I may say that my own work through years was of this type.

My special purpose now is to express the view that we require a group of psychologists who shall unite thorough training in modern scientific psychology with thorough training in modern scientific medicine. A great many important advances in science are made by men who bring to bear upon the problem the methods of two widely different departments of science. Thus we have the physical chemist who unites the training of the physicist and the chemist. What I wish to say is that, in addition to the different types of psychologists we now have, we need a large number of men who are thoroughly trained in the spirit and in technique of medicine as well as in the spirit and technique of scientific psychology. A man who has only the latter may and often does make important scientific contributions, but he cannot be a diagnostician. He cannot be a diagnostician unless he has in a considerable degree the training of the physician. No doubt the best

of our psychiatrists have the double training to which I refer. What I am thinking of is a group of psychologists who attack the problems of scientific psychology with both types of training. These men may be concerned in a relatively small degree with metaphysical problems as to the nature of body and mind. No doubt many physicians are interested in that important problem, but the physician's primary concern in presence of a man is to discern what the situation is before him and what can be done about it.

I believe there would be a great clarification of the science of psychology if we had a group of men devoted to the science of psychology who after the manner of the physician would leave in the background all metaphysical problems and devote themselves to the diagnosis of human beings whom they have the opportunity to study.

I should be glad if some of the young men and young women in the School of Medicine would elect to devote themselves to the study of psychology in the way which I have indicated.

THE BLINKING ACT

WILLIAM J. MOENKHAUS, M.D.

I propose to review some experiments that have been made on the origin and cause of blinking,* and I have chosen this subject because I find it very easy. It also changed my ideas about blinking very materially, and it was very interesting to me.

One must distinguish between blinking and winking. Winking, in the human animal, means that you close one eye, and usually presupposes some psychology. Blinking seems not to be of that order. It is the closure of both eyelids unconsciously, and ordinarily we think that the blinking act is caused by some sort of reflex, possibly irritation of the cornea, conjunctiva, the outer surface of the eyelid, or possibly the eye muscles—something causing the act of blinking.

The studies were made in two ways. One was to rig up a little piece of apparatus placed on the forehead with a very delicate spring attached to each eyelid so that when the eyelid closed the act of blinking was recorded on the apparatus. It was found that after about ten minutes the individual will, say he is reading a book, become quite oblivious to the attachment of this instrument. Another method was to sit some place and watch the blinks of an individual and every time a blink occurred record it. In that way they measured the time that elapsed between blinks, that is, the inter-blink period. Evidently the shorter that period the more rapid the blink-

*Eric Ponder and W. P. Kennedy. On the Act of Blinking. *Quarterly Journal of Experimental Physiology*, Vol. XVIII, p. 89.

ing. They tried a good many subjects by these methods and found that there were three or four types of blinking. The most common type, which is present in about three-fifths of the cases, was an inter-blink period of around two seconds or less, with some scattered longer periods. The inter-blink period averaged about four seconds. Another type, which was relatively rare, was the inter-blink period of great variation so that sometimes a whole minute would elapse between the blinks—they were not piled up at any particular inter-blink time. In another type the blinks were partly rapid and partly around five or six seconds, and in still another type they were heaped around five or ten seconds apart.

The thing these experimenters emphasized was this, that the type of blinking is characteristic of the individual. By determining the type of blinking for ten minutes, then waiting fifteen minutes and then recording again, the type would be the same. The individual shows one type of blinking. They also thought it might be a reflex, so they started out to see if irritating the cornea would change the inter-blink periods. They had their subjects, their type of blinking being known, to smoke a cigarette without taking it out of the mouth, and of course the smoke went into their eyes. They found, in consequence, that there was a shortened blinking period. Irritation of the cornea may do that—that is not new to us, but before this we thought that perhaps it was always the principal cause of blinking. Then they tried the effect of moisture by putting people with a known type of blinking into a room with air that was fully saturated with water so that the cornea would not dry, and the result was that their type of blinking was not changed at all. It remained the same. We would expect that. Then they put these individuals into a room the air of which was exceedingly dry, but there was no perceptible change in the type of blinking, so that neither dryness nor moisture seemed to have anything to do with the type of blinking.

To be sure what relation the cornea and the conjunctiva had to this blinking act they cocaine'd the cornea and conjunctiva in some subjects, and they found that the blinking type remained exactly the same. They therefore concluded that the cornea and conjunctiva had no influence on the blinking act, normally. After cocaine'ing the cornea they let a man smoke a cigarette, and, of course, the smoke did not affect the blinking period.

They were still in doubt as to whether the reflex might not be initiated from the edges of the eyelids, or possibly from the outer surface. They finally got hold of a patient who had both Gasserian ganglia taken out, and they found he had a perfectly normal type of blinking. I think they had reason, therefore, for believing that the afferent path was not from the edge of the eyelid.

Of course there is one other source, and that is the eye muscles. Every time you blink you turn

your eyeball up and in about ten or fifteen degrees, and that means a reflex on your extraocular muscles each time. It was thought that possibly the stress or fatigue which would develop from holding the eyeballs so they might focus would be the origin of this blinking, the muscles demanding an intermittent rest period. They went to a hospital for the blind and went over some 200 blind individuals, and found all of these people were blinking quite normally. They also were sure that a blind person, blind from birth and with completely atrophied optic nerves, would not use the extraocular muscles in setting their eyes for vision as we do, so they eliminated the extraocular muscles.

Another source of the afferent impulse might be the retina itself. They tried some of their subjects with various degrees of illumination. They secured a record of their blinks and then varied the brightness of the room down to complete darkness. They even kept one man in the dark for twenty-four hours, and it did not change his type of blinking. They, therefore, concluded that blinking did not have its origin from the ocular nerve. Normal blinking does not seem to have any reflex origin. That does not mean that you cannot make a man blink by sticking your finger in his eye. This is a protective reflex.

They have hypothecated the blinking act as much like the respiratory act. So many times a minute, on the average, the respiratory center discharges and you go through the respiratory act. So from some center in the brain there is a discharge, depending upon the type, every two to three seconds more or less, resulting in the blinking act. It is central in origin and does not have its origin reflexly. That was new to me and of considerable interest. They were fortunate to secure a postmortem of an infant one of whose early symptoms was complete cessation of blinking, and they found in that individual a deterioration of the caudate nucleus, the pallidus portion. They concluded that in this part of the fore brain was probably located the center from which discharges cause blinking.

There is an additional reason for placing it there. Blinking does not develop, apparently, from any irritation of the baby's cornea or conjunctiva. I do not know whether this is so or not. I have only had a chance to watch a couple of babies and then I was not thinking about their blinking act, but it is said that up to about six months an infant rarely does a normal blink, but if there is an irritation of the cornea or conjunctiva it rolls its eyeball up rather than to cover it with the eyelid; after six months this blinking develops into its final form.

Blinking is associated, not with irritation of the cornea, but with a muscular act of some kind, particularly rolling of the eyeballs or movement of the head. Every time a child moves its head, it first blinks or rolls its eyeballs. Blinking is like the movement of your feet and arms when you

walk—it is an associated act, and these associated acts have their origin in this portion of the fore-brain. It is associated with movements of the head or the eye, but not with any irritation of the cornea or conjunctiva. I have tried it on myself. I think if you watch yourself carefully you will find that every time you turn your head you have a temptation to close your eyes. Of course you can turn your head without doing that, but it gets to be difficult if you try to do it a number of times. It is an associated act.

These experimenters wished to find out whether they could modify this after some fashion. First they watched the blinking of some fifty men and women in the street cars to get their curve, and found that the women in the street cars blinked perceptibly slower than the men. Then they took an observation of fifty men and women who were studying in a library, and there they found that the men blinked slower than the women. They explained that in a rather interesting way, which might be true. That is, that on the street car the women are rather more genuinely turned inward in their thoughts and do not observe the men and women sitting in the car, nor so much the things which are passing on the street, while men are more likely to be the other way. In the library, they found it was rather difficult to get the blinks of the women because they kept shifting their heads and watching things, while the men were more devoted to their study. That showed in the difference in their blink. One of these experimenters took an individual and after taking his type of blink, made him angry; he was angry for ten minutes, and during that time his blinking was almost doubled in rate, and after he cooled down it returned to normal. So that conditions of interest and emotions are likely to show themselves in a change in the blink, and if that interest and excitement is turned inward; as in the solving of a mathematical problem or in staring off at a distance, the inter-blink period is prolonged—the individual is likely to blink slower. If, on the other hand, his excitement calls for movement, he may tap his fingers or do something else—I can always tell when a good friend of mine is getting excited by the fact that he begins to use his jaw muscles and moves his scalp. That is his way of escape. That is the facilitated path by which an excess of excitement finds its way out. So blinking is a rather common way by which we have a facilitated path for the escape of excess nervous discharge. I think these experimenters have made their point very well.

To summarize—when I first heard of this I thought blinking was something external, something on the outside made one blink. I have changed my mind. I think it is probably primary,

due to a central discharge, which is subject, of course, to many external influences, but is intimately associated with one's mentality. As we put forth nervous energy we are likely to increase our blinking, and, of course, it is associated profoundly with head and neck movements and movements of the eyeball.

IS DIPHTHERIA INCREASING?

Last year the diphtheria death rate for Indiana reached the lowest level in the recorded history of the state, having 4.8 deaths per 100,000. We must not be over jubilant concerning this accomplishment, however, as it begins to appear as if 1930 might show an increased rate. The month of February, in spite of the fact that it was a short month, showed 146 cases reported, as opposed to 125 for the month of January and 110 for the month of February last year. It also showed nineteen deaths as opposed to eighteen deaths for the month of January. It is too early in the year to predict definitely that there will be an increase, but these figures should constitute a warning to the profession that diphtheria is still with us and that it will need to be watched carefully if the low level of 1929 is equaled.

| County | Total Deaths | Deaths in |
|-------------|----------------|----------------|
| | So far in 1930 | February, 1930 |
| Allen | 1 | 0 |
| Clark | 1 | 1 |
| Clinton | 1 | 0 |
| Delaware | 2 | 1 |
| Dubois | 1 | 1 |
| Elkhart | 1 | 0 |
| Greene | 1 | 1 |
| Howard | 1 | 0 |
| Jay | 1 | 0 |
| Knox | 2 | 1 |
| Lake | 3 | 3 |
| Lawrence | 1 | 0 |
| Marion | 8 | 4 |
| Monroe | 1 | 1 |
| Montgomery | 1 | 1 |
| Morgan | 1 | 0 |
| Perry | 1 | 0 |
| Randolph | 1 | 1 |
| Tipton | 1 | 0 |
| Vanderburgh | 3 | 1 |
| Vigo | 1 | 1 |
| Warrick | 1 | 1 |
| Wayne | 1 | 0 |
| White | 1 | 1 |
| | 37 | 19 |

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ALBERT E. BULSON, M.D., Editor and Manager

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EDITORIALS**ADVANCE-LINE DEFENSE**

The ever-present problem of carcinoma was never more important than it is now. The laity is being educated to its importance through many channels, and from observation and practical viewpoint is apparently more alive to it and more anxious to learn of its early symptoms and method of control than the rank and file of the medical profession. The slackness of the medical profession is particularly true regarding cancer of the breast and uterus, more especially the latter. Teachings of the laity seem to have been driven home much better regarding the breast. Increasing numbers of women are consulting physicians whenever they discover a lump in the breast, and the conscientious physician is advising the immediate removal of the lump for biopsy even though he may think the growth innocent. But, unfortunately, this is not so with uterine cancer. Women, being accustomed to periodic vaginal bleeding, disregard some irregularity of the normal function. Should she consult her physician concerning it, he frequently without physical examination prescribes. The bleeding stops, and should there be no recurrence for some time she dismisses it from her mind. Should it recur, she considers it trivial, for her physician had not given it the grave consideration it deserved, and so begins another neglected case of carcinoma.

True, the teachings, especially of the older practitioner, were to regard the menopause age as the cancer age; but the younger woman deserves the same consideration. The most suspicious bleeding is the small, frequently almost colorless, showing between the regular periods, and is most likely to be disregarded by the woman herself.

Cancer is apparently on the increase among the young. Is this true, or is one, or both of the following propositions facts?

First, are we diagnosing cancers earlier and finding them before the woman has died from some intercurrent disease; or,

Second, because of decreased mortality among the young, are more lives being saved from an early death to become victims of cancer at an early age?

In other words, is the proportion of cancer among the young actually greater, or are there

simply a greater number of young to develop cancer (the percentage remaining the same)?

Whatever the cause, it is a fact we have more cancers demanding diagnosis today than ever before, and it behooves the physician to be ever on the alert and earnestly and continuously to educate his patients. The discussion of menstrual disturbances and irregular menstrual bleeding is rather a delicate subject to be discussed freely in lay journals and with mixed audiences; therefore, it devolves upon the family physician to instruct his patients. While, of course, cancer occurs more often in women past thirty years of age, yet it does occur much younger. No matter at what age irregular bleeding may occur nor from what apparent cause, the physician who does not make a careful examination of the uterus and warn his patient what this may mean is neglecting his duty and possibly condemning a woman to prolonged and unnecessary suffering and sacrifice of life.

While we do not know the cause of cancer, yet we do know that uterine pathological conditions apparently predispose to cancer; therefore, we owe the same duty to the uterus, to correct lacerations, polyps, fibromyomas, etc., as we do to the breast to remove lumps, and thereby circumvent the possibility of malignant development. With our present-day limited knowledge of the cause of cancer, its control is in the hands of the general practitioner, the family physician. Upon him rests the responsibility of educating his patients and making early diagnosis, as early diagnosis offers the only hope for cure.

TONSIL AND ADENOID OPERATIONS IN THE VERY YOUNG

The parents of some very young children that are almost suffocated from the effects of huge tonsils and an enormous bunch of adenoid tissue that completely closes the nasopharynx are told by their physicians that a tonsil and adenoid operation never should be performed on any child under six or seven years of age! What idiotic nonsense! And what an infinite amount of harm is done to suffering youngsters who can be made comfortable and free from many possible diseases and ill health by properly performed tonsil and adenoid operations. No matter whether a child is two or twelve years of age, a tonsil and adenoid operation should be performed if indicated. It would be just as sensible reasoning to say that no young child should be operated for any malformation or pathological condition that only surgery will correct. Why not object to the early correction of hare lip and cleft palate? Incidentally, we note that a member of the ear, nose and throat department of the Indiana University School of Medicine has reported (French Lick session of Indiana Academy of Ophthalmology and Otolaryngology, December, 1929) that with the approval of the departments of medicine and pediatrics he has done tonsil and adenoid operations on babes, one only

five months of age, and mastoid operations on children as young as one year of age, with very happy results. In reality very small children may have what has been termed a "lymphatic tendency," and suffer from obstructed breathing from an excess of tonsil and adenoid tissue. If syphilis can be excluded and there are no other contraindications then surgery is indicated, no matter what the age of the patient. In other words, age alone should not be a contraindication to the performance of a tonsil and adenoid operation to improve obstructed breathing.

THE YARDSTICK RULE OF COMPENSATION BOARDS

It makes us smile to read the report of the chief actuary for the State Industrial Commission of Ohio concerning the care for the health and welfare of the thousands of working men and women who annually are the victims of industrial accidents within the confines of Ohio, and the inference drawn that generous treatment is given. It may be that the commission is generous to the workers, but from actual experience we know that such generosity does not extend generally to the physicians and surgeons upon whom rests the responsibility of giving the injured workers expert care. From actual experience we are inclined to believe that the commission measures professional services by a yardstick at so much per yard, and are uninfluenced by any differences as to the amount or character of services rendered in an individual case. Thus it would seem that a broken leg merely is a broken leg, and services for caring for that broken leg are subject to the yardstick rule concerning compensation whether that broken leg is a simple fracture or a compound fracture, whether erysipelas or blood poisoning sets in, or for that matter whether there are any complications that would demand extra care and attention over that required for a simple broken leg. Then it appears to us that no discrimination is made as to the character of services rendered. In other words, it would seem that the commission has inflexible rules, whether fair or not, and apparently do not admit that there are any circumstances that alter cases. That sort of an attitude is altogether too prevalent in adjustments in compensation cases, and while it no doubt is true that there are those who would exact unfair treatment if they could, yet that is no reason why every case coming up for settlement should be looked on with suspicion and with the thought that it possibly is another case of taking advantage of the commission. We are satisfied that most industrial commissions or boards invariably give the laborer the benefit of the doubt, and perhaps that is right, but we never heard of an instance where a physician, who forms such an important cog in industrial work, has been shown any favors, and oftentimes he does not receive even common justice.

BUYING A SURGICAL PRACTICE

In one of our Indiana cities there is a young, bombastic and self-opinionated physician, known to have had very indifferent medical education and no training in surgery, who suddenly blossomed out as a surgeon and announced himself as a surgeon in the lay press. About the same time a number of general physicians, most of them having a reputation of being poorly qualified and more or less incompetent, were known to be circulating stories among lay persons to the effect that the young would-be surgeon "is the best surgeon in the state and by all means should be consulted for any troubles requiring surgical attention." It was not long until business seemed to be thriving, and the fact that a few unnecessary deaths and more bad surgical results were a part of the record did not seem to influence the increase in business. Later, to use a slang phrase, "the cat was out of the bag," through the circularization of a letter, over the erstwhile surgeon's signature, in which was offered fifty percent of any fee collected from any patient referred.

What we cannot understand is, how any physician possessing a spark of honesty in his soul, can sell his patients to a surgeon rendering mediocre service, and perhaps jeopardize their lives in consequence, for ill-gotten gain. It may be argued that some experienced and well-trained surgeons, even those who have taken the oath of the American College of Surgeons, are dividing fees, and that the patients' interests are not jeopardized if such surgeons render the services. However, it is a well-known fact that it is the poorly equipped surgeons who are paying the largest commissions to secure business, and the temptation to secure the largest fee when referring patients is too great to be overcome by many general physicians. Even some of the pious physicians, who sit on the front seats in our churches on Sunday and pray loudest and longest at the Wednesday prayer meeting, not only have no hesitancy in taking money which they do not earn, by way of commissions on cases referred to surgeons, but sometimes actually request it.

Like the prohibition question the buying and selling of patients is a problem to be solved, but the problem will not be solved until there is a public demand for its settlement in an honorable and fair way. When the public finally learns that it is getting the worst of the bargain in the fee-dividing practice among physicians and surgeons, then there will be an uprising that will shake the medical profession to its very roots, and we shall not be surprised if there will be reprisals of a very exacting and sensational nature.

TRENDS AND OPPORTUNITIES IN MEDICAL PRACTICE

In an excellent address on "The Trends and Opportunities in Medical Practice", Dr. Olin West, secretary of the American Medical Association, (*Wis. Med. Jour.* for December, 1929), presents some facts that are worthy of the attention of the entire medical profession. After calling attention to the pet theories of a few that are blatantly advertised, and the propaganda that is floated for the purpose of securing special privilege or profit by the agitators and promoters, Dr. West calls attention to some real problems that deserve the most careful thought and consideration of the entire medical profession. One of the most dangerous is the tendency on the part of corporations of one kind or another to do away with the individual practice and put medicine on a machine basis. Some corporations are organized for the purpose of making money out of the practice of medicine, and they propose to furnish the service of paid agents at a cost below the real cost of adequate scientific service. These enterprises are more dangerous to the public than to the medical profession, and eventually the public will look at the matter in that light. In the final analysis these schemes are for the purpose of making money out of the exploitation of the medical profession. Some of these enterprises, already in existence, are reputed to be making a fabulous profit, but it is questionable if far better service is not rendered by private physicians to individual patients. Dr. West says that he is convinced that it is *not* possible to furnish the best medical service on the basis of machine methods, and that anything which tends to destroy the intimate human relation which should exist between the physician and his individual patient tends to destroy the value of medical service rendered.

Aside from these organizations that are practicing medicine but controlled by laymen, there are certain groups in the medical profession itself which seem inclined to organize so-called hospital associations, and they seize upon the name "clinic" because they believe it is a name which will give them prestige and enable them to make more money. As a matter of fact, some of these organizations while possibly making money are doing it in a tricky and unethical way which reflects upon the integrity of the medical profession as a whole and constitutes a very serious menace to the welfare of the general public. Any effort to commercialize the practice of medicine or to prostitute the practice of medicine for personal ends should be combatted, whether the scheme arises within or without the medical profession. If the standing and dignity of the profession is to be upheld, then of necessity we must be loyal to the traditions of the medical profession, and an effort should be made to stamp out commercialism and uphold the Principles of Ethics

which has guided the profession for many years and is the strongest safeguard that can be enforced for the public interest, and the strongest safeguard that can be established for the interests of the profession itself as a scientific profession. We must not make the practice of medicine a trade. A profession cannot remain a profession without ideals, without traditions, or without ethics.

Another tendency that needs rebuke is that toward the over-hospitalization of patients. Dr. West relates an incident where a layman told him that a physician insisted that whenever any member of the layman's family got sick from any cause whatsoever, before the physician was called the sick member of the family must go to the hospital. The layman then related incidents that occurred in his family which sent various members of the family to the hospital, ranging all the way from a stubbed toe of a six-year-old boy, up to a brain abscess. Dr. West says that he imagines it was all right to hospitalize the brain abscess, but he does not believe it was right to hospitalize the stubbed toe. Similar incidents are not rare. The disappearance of the family physician has been widely lamented in various places and by various persons. The family physician has the greatest influence in the home where it is entirely possible for him to do the major portion of his practice. He loses a very peculiar part of his intimate relation as the family physician if he sends everything to a hospital. Aside from this he very often puts his patients to unnecessary and inexcusable trouble and expense by hospitalizing patients who can be cared for as well and sometimes better in the home. Unfortunately a great many physicians, by their own actions and of their own free will, have removed themselves from the status of the family physician. This is unfortunate. The family physician should protect the health of the family he serves, and to utilize for the benefit of its every member those measures which he believes to be efficacious. He should take the initiative in offering advice as to what should be done under certain conditions, such as urging circumcision when necessary, vaccination for communicable disease, in fact, he should be conscious of his responsibility to keep the members of the family well in accordance with his scientific knowledge and an appreciation of the responsibilities that rest on him. The physician who gets away from family practice in the home and substitutes for it practice in the hospital, has taken a step that eventually will be his undoing as well as the undoing of the family.

Another criticism worth consideration is that concerning the tendency whereby nurses are over-trained. We almost have succeeded in making doctors out of most nurses, and in many instances we have made most nurses believe that there is no service for them except in a hospital, and that they

ought not be called upon to do anything except in the capacity of an individual nurse to an individual case. We also have almost succeeded in making nurses believe that they need a very profound knowledge of pathology, physiology, and other branches of medical learning, until they have almost gained the ascendancy over us in many particulars and we and the public are in a bad fix. There ought to be a definite policy adopted, prosecuted and maintained with respect to the training of nurses, and the services of nurses to the public, so that the public can secure necessary and adequate nursing service, and at the same time the nurse who does her duty and does it well shall receive adequate compensation.

Dr. West touches a vital point when he mentions the friction that sometimes exists between the medical profession and departments of health. Sometimes the medical profession is inclined to withhold its cooperation with the department of health, and there are reasons for this which many times are not due to faults of the medical profession but originate in certain official actions taken by the departments of health themselves. It is unfortunate that some health officers are in such a big hurry to turn the world over that they have adopted and put into practice certain procedures that the medical profession does not believe are really for the best interests of the public, because the medical profession in its capacity of practicing physicians knows that a good many things which appear on the surface to be extremely beneficial are in the long run not beneficial but harmful. Health officers in some instances have acted with poor judgment and without the fundamental knowledge of all the facts involved. Public health is one of the fields of medicine, and the guidance of public health work is part of the practice of medicine. The organized medical profession ought to assume leadership in the matter of public health, and it can be of wonderful service to health departments in giving the benefit of its counsel and guidance in active, constructive health work.

Concerning the practice of medicine by lay organizations, Dr. West reminds us that many of the schemes proposed by laymen for profit cannot be operated except with the assistance of physicians, and the physician who really has the proper perspective will not yield to the specious offers of laymen that tend to break down the traditions of the profession and commercialize scientific medicine and the service that should be rendered to mankind. The layman who it is reported is considering seriously the advisability of turning over several hundred thousand dollars to a faddist or quack for the purpose of establishing hospitals and clinics to be used by this fellow to promulgate his silly theories and, designingly or not, to prey upon the public, should be frowned upon even though there is no law to stop it. How

much better it would be if this man with a fortune running into millions would donate his money to research work at the hands of recognized medical scientists. Furthermore, the millionaire who has promised to devote several million dollars to an enterprise that has as its object lowering the cost of medical service, is attacking the problem at the wrong end, and the effect of any such arrangement is going to be to the detriment rather than the benefit of the public, because it inevitably will tend to destroy the independence of the very manhood of those who accept its dole. When this gentleman says that the cost of medical service and the cost of hospital service both are too high, and that the ordinary man cannot pay these costs, he probably forgets that it is difficult for the man who has been the victim of hard luck to pay these costs, but that there never was a time when the man in hard luck could obtain such service without the intervention of some philanthropist who expected to cut down these costs, and there never has been a time when somebody could not pay for medical services like others could pay. It always has been difficult for the unfortunate, for the wasteful, to pay, and hard as it may sound to say it, it may be a very bad thing for society if it were otherwise, for there is a tendency to make things too easy for the individual, and anything which destroys a man's rightful independence is detrimental to him and to society. A man can be independent and honest even though he is poor, and he can maintain just as high a quality of independence and honesty by paying what he can, as the millionaire can maintain though he pays from his wealth and premiums for all that he gets. Any scheme that will result in teaching the people that they are entitled to something for nothing, or that will lead to the pauperization of any considerable part of the social element, will be detrimental to the public interests. It is just as well that the medical profession should analyze and study carefully this problem and decide intelligently just what part we are to play in these schemes.

A rap was taken at the Committee on the Cost of Medical Care by saying that originally the committee was composed of laymen and they announced their determination and began to tell the world what was the matter before they discovered anything. At present the committee is composed of a relatively large number of physicians, and an equal number of laymen. It is attempting to develop the facts in connection with the cost of medical care.

As a side issue in the discussion of the economic problems facing the medical profession, Dr. West refers to the installment plan of buying which forms an important part in the cost of medical service. He said that the janitor of his building has a finer piano, a more costly radio, a better automobile, a prettier Oriental rug than he

(Dr. West) can afford. The janitor's wife also has an electric washing machine, and an electric vacuum sweeper, and the Lord knows what else, and all these luxuries were bought on the installment plan. If the janitor's wife or children should be sick and have to go to the hospital for operation, the attending physician would have to forego his fee or wait a long time for a part of what ordinarily would be a fair charge for his services. The hospital, too, might have to wait for its fee. These gentlemen who are promoting all of these supposedly wonderfully fine schemes for relieving the poor man of the burden of the cost of medical care, have never asked the prospective purchaser when he went in to buy whether he had any sickness in his family, and they never have reduced one cent the price of a wash-tub, or pair of shoes, or sack of flour, because the buyer has been a victim of bad luck. Go to the banker to borrow money and find out what you can do. You will have to pay higher interest than the rich man, and give more or better collateral than he, and the banker will not ask you one question as to whether or not you have had sickness in your family. High pressure salesmanship is a part of our economic system of today, and in consequence the last farthing of the ordinary man is tied up through the installment plan of buying and selling. Therefore, when we talk about the high cost of medical care, we must take into consideration the whole economic situation as it exists today, and study and analyze it carefully. The cost of medical care is a mere speck on the economic map.

There has been much loose talk about the income of physicians, and investigation seems to show that a large number of practitioners of medicine actually are practicing medicine at a loss. The average man practicing medicine is making a living, and in most instances is able to keep his family in reasonable comfort, but is not able to lay up very much to insure him against the discomfort and hardships that the years to come may bring. A knowledge as to the income of the majority of physicians may have a very helpful influence on some of the philanthropic millionaires who seem to think that all doctors are rich, and on some others who seem to think all doctors are paupers. When the facts are known, they probably will show that physicians generally are far more poorly compensated than are the members of any other groups in our social structure whose usefulness is not nearly so large.

Dr. West concludes his splendid address by saying that it is a privilege to be an honorable member of the medical profession, but privilege entails responsibility, and the greatest responsibility of the profession today is to "deliver the goods" in the practice of medicine. He feels that we are delivering the goods in that the American public is getting better medical service today than it ever got before, and the medical profession

today is as highly respected and honored by the public as it ever was. What we need to do, by precept and example and by determined effort, is to keep our standards high and to fight to the death every degrading influence. We should do everything we can to promote the art and science of medicine and to make its every member a better physician, capable of rendering better service to humanity. We also have another great responsibility, and that is to see to it that the ideals and traditions of medicine are fully maintained. Whenever we get away from our ideals and time-honored traditions, we are no longer a profession but a trade, a business. To make the practice of medicine a business means to destroy scientific medicine and to jeopardize public welfare, and to retard the development of mankind toward the highest plane of human efficiency and culture.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

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Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve you.

THE program for the meeting of county society secretaries at the American Medical Association in Chicago, April 23rd, is published in the Secretaries' Department in this issue. Various heads of departments and bureaus of the American Medical Association will be the speakers. The Indiana State Medical Association pays the railroad fare of all county society secretaries. Every Indiana county medical society secretary should be in Chicago, April 23rd.

MOST of the well-advertised foods are not only expensive but do not come up to the advertised claims. If physicians would take a little more time to study the value of the ordinary foods that may be purchased in any market, and advise their patrons concerning a sensible diet instead of permitting the patient to get information from advertisements, there would be fewer high-priced manufactured foods on the market.

"WORKERS in the throat, nose and ear departments of hospitals see from time to time children with persistent unilateral or even bilateral nasal discharge, the cause of which proves to be the presence of some foreign body, for example a pea, a button, or a piece of string that the child has pushed up its nostrils. Usually these bodies

are found lying on the floor of the inferior meatus and the discharge will persist as long as they remain there." (Barford in the *British Medical Journal*, November 16, 1929.)

WE smile every time we look at a drug store sign, for the modern drug store does everything except sell drugs and put up prescriptions. The latest innovation is for the drug store to sell lunches, and it is said that in the large cities the drug stores are driving many restaurants out of business, and for the reason that so many people can camouflage their visit to the drug store for food by making people think that the food seeker has gone into a drug store to purchase a tooth brush or a cake of toilet soap.

JACK JOHNSON, negro boxer, at one time heavy-weight champion boxer of the world, has solicited the help of a city administration in his attempt to collect a bill from a music hall management. If Johnson has even half of the punch that he had a few years ago, we believe he will have no difficulty in collecting the account if he shows some indication of doing his own collecting. We have an idea that if we owed Jack Johnson an honest account he would not have to ask for it a second time.

"It is true that there are in the profession a small minority who capitalize the fears of their patients, exaggerate the importance of their own services, advise and execute unnecessary procedures, charge all and more than their patients can pay and, in fact, prey upon them, but these men are few, though the great majority must bear the odium of their conscienceless methods. * * * Exorbitant charges and commercial mindedness are as much frowned upon by the profession as a whole as by the laity."—FOLLANSBEE, in the January, 1930, *Survey-Graphic*.

IN visiting some of the large medical clinics we have been surprised to know how general is the practice among some of our country's best operators to use local anesthesia for a large percent of general operations. The trouble with so many surgeons who insist upon general anesthesia for practically everything is that they never have learned the technique of local anesthesia, and are too lazy to investigate the subject and try out the method under proper control. Failure to secure good anesthesia usually is due to false technique, and that is just as true in local as in general anesthesia.

A THREE-YEAR-OLD Denver boy has the tobacco habit. The Associated Press reports that he smokes six cigars per day. He gained nation-wide fame last August when it was learned that he had been blowing smoke rings for several months.

Before acquiring the tobacco habit he had been ill and a sufferer from insomnia. "The family physician prescribed a pipeful of tobacco for Billy," the father said. "He seemed to enjoy it from the first puff, and after that he would raise the roof if not allowed to smoke." Brilliant physician to have a child under three years of age try a pipeful of tobacco for anything!

CONCERNING the soft food diet in vascular hypertension, the *Journal of the A. M. A.* of November 16, 1929, editorially says that several investigators, notably Berger and Feinberg (*Archives of Internal Medicine* for October, 1929), have failed to see any unquestioned modification of the blood pressure curve which could be attributed definitely to variations in the sodium chloride intake. *The Journal of the A. M. A.* then says, "The growing evidence ought at least to dampen the ardor of those who still are inclined to bank on the salt-free regimen in hypertension, and encourage them to seek assiduously for more promising and dependable therapeutic possibilities."

THE hundreds of thousands of castrations of animals done without any anesthetic of any kind whatsoever, arouses no protest from the anti-vivisectionists who howl about animal experimentation done in the interests of humans as well as animals, and the editor of the *Pennsylvania Medical Journal* asks "Why?" Attention also is called to the fact that anti-vivisectionists are not troubled by the frightful suffering and deaths of animals by hunters, pigeon shooters, fishermen, dealers, by poor food, by cold, by exposure, filth in shipment and slaughtering, and many similar ways. The fact of the matter is that the anti-vivisectionists are not consistent.

THE average theatergoer has nervous prostration if he attends a play and is obliged to sit in the back part of the house, for no longer is it the thing for actors and actresses on the stage to talk to the audience or for that matter even elevate the voice so that it can be heard beyond the orchestra pit. In consequence people are tired of having the box office say "nothing ahead of the fourteenth row," as they also are tired of paying fabulous prices to ticket scalpers, so they are going to the movie houses where they can both see and hear. If the legitimate theater avoids losing out a change of policy must be adopted. Amplifiers would solve the question of hearing in the back rows, and breaking up the ticket scalping business through heavy fines to any ticket scalpers found charging more than a fifty-cent advance for any theater ticket will go a long way toward restoring the favor of the theater to the public.

TRUTHS about the serum diagnosis of syphilis is a valuable article contributed by Dr. John A.

Kolmer, in the *Journal of the A. M. A.* of November 9, 1929. After pointing out the established truths concerning the serum diagnosis of syphilis, which have withstood the vicissitudes of twenty-five years of time and remain today one of the most valuable of laboratory tests known to medical science, attention is called to the value of serum tests as aids in guiding the treatment of syphilis and as a criteria of cure, and emphasis is placed upon the fact that positive serum reactions frequently and usually are the first signs of relapse in syphilis following insufficient treatment or no treatment at all, and that spinal fluid examinations are now recognized as important and integral parts of the complete diagnosis and treatment of most cases of syphilis.

TALK about harmony in the medical profession, here is a good one: The attending physician and his family asked a confrere to see a very sick member of the family. Agreement as to diagnosis and treatment seemed to settle the question of confidence in one another. Later the temperature of the patient went up to 105 degrees, and as the attending physician was temporarily out of town the family asked the consultant as to what should be done and were told to sponge the patient for any fever over 101 degrees. A few hours later the regular attending physician, having returned to the case, blurted out, "If you want to kill the patient keep on with your sponging."

A lot of confidence the public has in physicians when there is such a lack of cooperation and harmony. Honest differences of opinion may be justifiable, but why such an exposition of tactlessness, or what we feel like calling general cussedness?

THERE are some physicians occupying high places in the medical profession, even as officers of reputable medical societies, that, charitably looking at it, use very bad taste in exploiting themselves in the lay press. We have in mind dozens of newspaper clippings sent in from various parts of the state during the past few months, and it is somewhat embarrassing to us to admit that they show there are supposedly high grade and reputable physicians who are just on the borderline in their lay advertising, and it would require only a little more self-praise to put them in the category of advertising quacks. We do not have in mind the physician whose name appears often in his local paper concerning visits out of the city to attend medical meetings, or calling attention to his appearance on the program of a medical society, but we do refer to the extravagant praise, real or implied, concerning physical equipment and ability. Such advertising constitutes exploitation which not only is in bad taste itself but creates a lot of ill feeling among confreres.

THE use of glycerine as a topical application in suppurating wounds is the title of a paper by M. E. Lichtenstein, of Chicago, in the December number of the *Illinois Medical Journal*, and the author concludes by saying, "No bacteriological studies have been undertaken at the present time, but the clinical use of glycerine in our experience warrants the following conclusions: 1. Glycerine, chemically pure, and applied to a suppurative wound at or slightly above body temperature, aids in diminishing the amount of wound exudate. 2. Spreading lymphangitis and tissue swelling may be inhibited or diminished by frequent applications of this substance. 3. Removal and re-application of dressings impregnated with glycerine are not painful and do not occasion as much discomfort as dressings commonly do in suppurative wounds. 4. Following the establishment of drainage from an infected wound subsequent to the use of hot, wet dressings, glycerine applications are of distinct value in avoiding maceration and the development of superficial infections that commonly follow continuance of hot, moist applications.

OUR present system of living as applied to practically every person in the United States is extravagant and does not permit the average person to lay up anything for the emergency which occurs when illness befalls. For some people a hospital is a necessity for the reason that the home is not what it was a few years ago, and therefore not a place where the sick can be cared for properly. Naturally this adds to the cost of sickness. Furthermore, hospitals are not what they were a few years ago, inasmuch as they have kept pace with the tendency of the times and furnish more attention and service of an expensive kind than ever before has been furnished by hospitals. It will be difficult to lower the cost of hospitalization. Therefore, as pointed out by the *Jour. of the A. M. A.*, January 11, 1930, "The problems of medical care cannot be separated from all the other economic situations of modern civilization. It is true that far more patients are going to hospitals for medical care than actually require hospitalization from the medical point of view, but the home has disappeared and the helpmate who used to nurse the sick is now a clerk, a secretary, or an advertising copywriter whose income must not be disturbed. The only place for the ailing member of the family is the hospital. If the hospital is too expensive, somebody will have to wait for his money, and it requires no Ph.D to guess who that somebody is going to be." For allocating the expense of sickness if anyone is to be "the goat" it is the physician.

THE average yearly net income of physicians is given by *Fordham's Magazine* for July, 1929, as follows: The rural practitioner, \$3,284; physicians in towns of 5,000 population, \$4,800; in

towns of about 20,000 population, \$6,369; in cities of 50,000 population, \$7,022; and in metropolitan centers the income is \$7,125 yearly on an average. The net incomes of physicians correspond to the salaries of teachers, employees of manufacturing enterprises, and to the United States Army, Navy and Civil Service. The physician because he works as an individual has no pension to live on in his old age, and if he serves in a small community belongs in a three or six thousand dollar class, with the almost average foreman or unsuccessful salesman. If he practices in the larger city his net income is about on a par with that of the low assistant treasurer or the good average assistant purchasing agent. At best he is no better than a major or colonel in the army or commander or captain in the navy. He really is worse off because he cannot be retired on three-fourths pay. In commenting upon these facts the official bulletin of the *Chicago Med. Soc.* says: "The truth is that members of the medical profession have incomes no larger than do the relatively lowly employees of the corporation whose highly paid officials are making the most noise (concerning overcharging on the part of physicians)."

THE famous opera singer, Galli Curci, has cut the smokescreen around grand opera and frankly says that not only the tired business man but many others who are pretending to like grand opera are really deluding themselves, for they prefer a good musical show, comedy, or the movies to rest tired and shattered nerves. The famous singer claims that a fine voice will show to good advantage in simpler music that is more pleasing to the average person.

We always have felt that a good many people go to grand opera because they think "it is the thing to do." and not really because they enjoy it, for when all is said and done only about one out of ten who go to grand opera really enjoys it if the truth is admitted. It often has been said that you have to be educated to appreciate grand opera, but if we would get an honest opinion from a majority of those who have been regular attendants at grand opera performances for many years, whenever possible to attend, we probably would admit that getting educated to appreciate grand opera is a good deal like educating a horse to eat sawdust; about the time the horse is educated, he dies. We confess to an appreciation of some grand opera, but a little of it goes a long way, and for the tired business men and women with shattered nerves, a good musical show or a comedy is better medicine than any physician can prescribe.

THE anti-vivisectionists make some vicious and unfounded statements concerning cruelties and barbarities in connection with animal experimentation. Recently, in an open letter published in the lay press, an anti-vivisectionist made the state-

ment that dogs cannot be anesthetized with chloroform or ether, and that therefore all animal experimentation on dogs is attended by frightful suffering on the part of the dogs. The totally unfounded statement also has been made that in certain hospitals where animal experimentation is carried on the vocal cords of the dogs are cut in order to prevent barking that would disturb people in the hospital. If the cause of anti-vivisection has the slightest reason for promotion it certainly will not be helped by such unprincipled misrepresentation and lying. We feel sure that all animal experimentations carried on in our institutions of learning, and particularly in connection with the development of medical and veterinary science, are not attended by the slightest suffering on the part of the animals. The benefits derived for humanity and even animals are invaluable, and far outweigh any silly and inconsistent arguments against animal experimentation as offered by fanatical anti-vivisectionists.

A LAYMAN complains that the bulk of the medical and surgical service is bought with little regard to its grade, quality or character, and that ability in medical practice is no more in accord with the reputation than it is in law, politics, social work or preaching. A license to practice medicine is not a certificate of positive ability, and at best it is only a guarantee against gross ignorance and incapacity. To all of which we would like to say that the fault lies not with the medical profession but with the public. Whenever we attempt to secure laws that will insure better educated and more competent physicians and surgeons, and, more important than all, protect the public, we are told that we are trying to establish a "medical trust." Whenever we attempt to put a grossly incompetent physician or surgeon out of business, or punish a conscienceless quack even though he is permitted by law to practice medicine, we are accused of persecution. In fact, whenever we attempt to establish standards by which the ability and training of physicians and surgeons may be estimated fairly well, we at once meet with opposition not only on the part of the public but by a goodly percentage of the medical profession representing that element that cannot come up to the standards. When the public gets back of us we shall have more uniformity in the excellence of service rendered instead of having it only in spots as it is now. The public should appreciate this fact, and would have appreciated it had the medical profession not been so self-satisfied and so non-militant in its attitude toward the protection of the profession itself as well as the public.

CALIFORNIA'S sterilization law, instituted over twenty years ago, seems to have worked successfully and met with the approval of all thinking people. In the California state institutions up to

January, 1929, there have been over 6,200 sterilizations, nearly three times as many as in all the rest of the country. There were no effects upon the sexual life of the patient so far as can be ascertained by a careful checkup of the opinions of physicians. So far as the question of human betterment is concerned, the comment by Gosney and Popenoe, who have published a summary of the results of these operations, are interesting. They point out the enormous size of the mental disease problem and note that there are three times as many patients in hospitals for mental disease today in proportion to the total population as there were in 1880. About 300,000 patients enter institutions for the insane each year, although many of them do not stay long. It is estimated that nearly four percent of the population of this country become legally insane at some time before they are dead. The situation in regard to the feeble minded is somewhat similar. About four or five percent of our population are practically feeble-minded, although only sixty percent of them are in institutions, leaving at large a much greater proportion of feeble-minded than insane. Many of the mentally deficient, however, are useful and law-abiding citizens even if not brilliant, but it must be admitted that from their ranks come more than a fair proportion of the delinquents and law-breakers and an overwhelming proportion of the dependents. It is they who absorb the taxpayers' money in public and private charity. They, too, have a birth rate which is equal to if not somewhat higher than the population as a whole. To prevent propagation in these groups, sterilization is offered as a satisfactory means. These authors seem to think that the California experiment has been a distinct success. There have been no bad effects nor failures; the mortality is practically nil, and the results presumably are all that could be expected. It certainly tends to prevent the birth of many inferior children, thereby allowing the proportion of superior children born in the population to increase. It also reduces definitely the burden of caring for defectives and dependents.

SECRETARIES' DEPARTMENT

The secretaries' meeting in Chicago will be held April 23, 1930, at the headquarters of the American Medical Association. The meeting opens at 9:00 a. m., and the program will be good. I hope to see every county secretary in the state at this meeting.

A. M. MITCHELL, M.D.

PROGRAM

Annual Conference of Secretaries of Component County Medical Societies of Indiana State Medical Association
to Be Held at

535 North Dearborn Street, Chicago, Ill.

(Headquarters of the American Medical Association)

Wednesday, April 23—9:30 A. M.

(Call to order by Chairman A. M. Mitchell)

1. American Medical Association Headquarters—W. C. Braun.
 2. The Council on Medical Education and Hospitals—N. P. Colwell.
 3. The Laboratory—P. N. Leech.
 4. The Bureau of Investigation—A. J. Cramp.
 5. The Council on Pharmacy and Chemistry—W. A. Puckner.
 6. Publications of the American Medical Association—Morris Fishbein.
 7. The Bureau of Legal Medicine and Legislation—W. C. Woodward.
 8. The Bureau of Health and Public Instruction—John M. Dodson.
 9. The Council on Physical Therapy—H. J. Holmquest.
 10. Your Association—Olin West.
- 1:00 P. M.—Luncheon—Guests of the American Medical Association.
- 2:00 P. M.—Tour through the American Medical Association Building. (Most interesting feature of meeting.)

To the Secretaries of County Medical Societies:

Now that we are fast approaching the time for our annual county secretaries' meeting, which will be held at the A. M. A. building in Chicago this year, I hope every secretary is making definite plans to be there. If you never have gone through that magnificent building, that alone is more than worth your trip. If you have been through it, as I have, you will not miss going again. There will be something worth while going on all the time. This year, with the state associations paying the railroad fare, every county secretary owes it to his local society members and the state association to attend this meeting, get all the information possible, take back a good report to his society, and be the cause of bigger and better activities in his society than ever before. This requires the cooperation of all the members, but there must be a leader, and the county secretary is best fitted for the job.

I have little patience with the society which, when it has a good and worthy man doing things, elects some other untried man for the position, and I have even less patience with the society that fails to elect a new man when it knows the members know that the organization is functionless and fast going out of existence. If a society is inactive, so is the county secretary—turn him out and try someone else. He won't be any worse. Being a county secretary of a medical society is a man's job and requires one to act all day, part or all of the night, take no vacation from planning better meetings for the year. My greatest pleasure comes from planning and carrying out a local meeting and having the members enjoy being present and feel that the time given to the meeting is well spent. One must not criticize a member too severely for a supposed neglect for we might do the same thing ourselves under the same conditions. Cooperation goes far in building a strong medical society.

J. C. BURKLE, M.D.

DEATH NOTES

JOHN E. HOOVER, M.D., of Indianapolis, died March 16th, aged seventy-one years. Dr. Hoover graduated from the Medical College of Indiana, Indianapolis, in 1881.

ALICE B. WILLIAMS, M.D., of Columbia City, died March 23rd, aged sixty-four years. Dr. Williams had served as coroner for Whitley County for many years. She graduated from the Fort Wayne College of Medicine in 1894.

HOWARD R. HARLEY, M.D., of Andrews, died March 9th, aged forty years. Dr. Harley graduated from the Indiana University School of Medicine with the class of 1929. He was a member of the Huntington County Medical Society, the Indiana State Medical Association and the American Medical Association.

MARY WILLING OWEN, M.D., of South Bend, died March 5th, aged fifty-seven years. Dr. Owen graduated from the General Medical College, Chicago, in 1894. She had practiced in South Bend for the past twenty-five years. She is survived by her husband, Dr. William L. Owen, and her son, Dr. Douglas W. Owen.

HARRY B. HAYWARD, M.D., of Valparaiso, died March 20th, aged fifty years. Doctor Hayward was doing a tonsillectomy, and had removed one tonsil, when he fell to the floor and died almost instantly. He graduated from the Chicago College of Medicine and Surgery in 1903. He was a member of Porter County Medical Society, the Indiana State Medical Association and the American Medical Association.

NEWS NOTES AND PERSONALS

DR. CARL McCASKEY, of Indianapolis, presented a paper on "Deafness" at the March 4th meeting of the Muncie Academy of Medicine.

DR. AND MRS. HUGH A. COWING, of Muncie, will sail from New York, May 14th, with the Interstate Postgraduate European Clinical Tour.

DR. IRVING W. POTTER, of Buffalo, New York, presented a paper on "Technique of Elective Version" before the April 1st meeting of the Muncie Academy of Medicine.

THE Jay County Medical Society held its regular monthly meeting at Portland, April 4th. Dr. Robert Moore, of Indianapolis, presented a paper on "Some Facts to Consider in the Examination of a Heart Case."

THE March seminar of the Indiana University School of Medicine was held March 28th. Case reports were presented by Drs. Edward Billings,

G. Burch Mehlin, Earl Wiseman, Joseph Clevenger, and papers were presented by Drs. Max Bahr and Edward Thompson. A social hour followed.

THE next examination for license to practice medicine will begin at 9 a. m. Tuesday, June 17, 1930, in the House of Representatives of the State House, Indianapolis. The examination will continue for three days.

DR. GEORGE W. MACKENZIE, of Philadelphia, was the guest of the Indianapolis Ophthalmological and Otolaryngological Society, March 13th. He held a clinic in the afternoon and following the dinner at six-thirty, he presented a paper on "Diagnosing Deafness."

DR. J. A. MACDONALD, of Indianapolis, has resigned his place in the Bureau of Publicity of the Indiana State Medical Association and Dr. James H. Stygall, of Indianapolis, has been appointed to succeed him.

DR. HERMAN M. BAKER, of Evansville, presented a paper on "Fusiform Spirochetal Infection as a Cause for Bronchial Asthma and Other Allergic Conditions," at the March 11th meeting of the Muncie Academy of Medicine.

THE March 13th meeting of the Tippecanoe County Medical Society was held in the Purdue Memorial Building, Lafayette. Dr. A. M. Mendenhall, of Indianapolis, presented a paper on "Some of the Newer Things in Obstetrics."

THE Northeastern Indiana Academy of Medicine held its meeting at the Gawthrop Hotel, Kendallville, March 27th. Dr. James G. Carr, of Northwestern University Medical School, Chicago, presented a paper on "The Management of Cardiac Failure."

THE *Mental Hygiene Bulletin* for January, 1930, contains an account by Dr. Anita M. Muhl of the first mental hygiene meeting held in Iceland. Dr. Muhl is the director of child guidance work for the state of California. She received her B.S. and M.D. degrees from Indiana University in 1918 and 1920.

PROF. GEORGES PORTMANN will give a five-week, intensive postgraduate course in ear, nose and throat surgery, at the University of Bordeaux, France, beginning July 21, 1930. This course is open to American physicians, and information concerning it may be obtained from Dr. L. Felderman, Mitten Building, Philadelphia, Pa.

THE Cass County Medical Society held a meeting February 20th. Sixty members of the profession attended the banquet session. Dr. G. G. Eckert, of Marion, presented a paper on "Specialism vs. General Practice." Dr. W. F. McBride,

of Dayton, Indiana, presented a paper on "General Practice vs. Specialism." Rev. E. Richard Edwards talked on "Saddlebags and Specialists." At the regular monthly meeting held March 20th, Dr. Thomas Cooper, of Logansport, presented a paper concerning medical fees and the financial side of medical practice, and Dr. Joseph Rubsam, of Logansport, presented a paper on "Consultations."

MEMBERS of the Cass County Medical Society held a meeting at the Barnes Hotel, Logansport, March 26th and voted to hold regular banquets and programs on the third Thursday of each month, with the exception of a short summer vacation period. Dr. Joseph Rubsam presented a paper on "Consultations" and Dr. T. C. Cooper on "Finances."

THE license of Grant S. Beaty, M.D., of French Lick, has been revoked by the Indiana State Board of Medical Registration and Examination. Doctor Beaty now is serving a sentence in Federal prison for conviction of felony. Dr. C. C. Root, whose license was revoked May 15, 1929, petitioned the Board to reinstate his license, but the petition was denied.

At the March 4th meeting of the Allen County Medical Society of Fort Wayne, Dr. R. H. Beeson, of Muncie, presented a paper on "Diabetes." The March 11th meeting was held in the General Electric dining-room, as guests of the General Electric Company. Dr. R. R. Durham, of the Henry Ford Hospital, Detroit, presented a paper on "Lobar Pneumonia" at the March 18th meeting.

THE U. S. Civil Service Commission announces open competitive examinations for senior medical technician and medical technician, applications for which positions must be on file with the Civil Service Commission at Washington, D. C., not later than May 7, 1930. Examinations are to fill vacancies in the positions of laboratorian and assistant laboratorian in the U. S. Veterans' Bureau and in positions requiring similar qualifications.

DR. AND MRS. HOMER G. HAMER, of Indianapolis, sailed from New York to attend the tri-annual meeting of the International Urological Association, which met in Madrid, April 7th to 12th. Following the meeting Dr. and Mrs. Hamer will tour through Spain and Italy, and expect to arrive at Oberammergau for the opening of the pageant. They will visit Berlin, Brussels, Paris, and spend two weeks in England, returning home in June.

A REORGANIZATION meeting of the Boone County Medical Society was held in the Witham Hospital, Lebanon, March 5th. Officers elected for 1930 are as follows: Dr. Robert S. Ball, presi-

dent; John D. Coons, vice-president, and Dr. Daniel VanWoerkom, secretary-treasurer. Drs. F. S. Crockett and F. T. Romberger, of Lafayette, assisted in the reorganization of the society. Future meetings will be held on the first Tuesday night in each month at the Witham Memorial Hospital.

THE Indiana Tuberculosis Association is distributing to Indiana physicians a pamphlet containing a resume' of the latest literature concerning the advisability of tuberculous patients returning to work after discharge from tuberculosis sanatoria. The pamphlet, entitled "Can I Go Back to Work, Doctor?," is available for any physician wishing a copy, and may be obtained by addressing the Indiana Tuberculosis Association, 1219 Meyer-Kiser Bank Building, Indianapolis.

BEGINNING this year, the American Association for the Study of Goiter will award a cash prize of three hundred dollars annually for the best original thesis dealing with some phase of the goiter problem. Theses should be submitted by June 1st to Dr. Walter M. Simpson, chairman of the Essay Committee, Miami Valley Hospital, Dayton, Ohio. The award will be given immediately following the coming meeting of the Association which is to be held in Seattle, Washington, July 10-12, 1930.

EXAMINATION of candidates for commission as assistant surgeon in the regular corps of the U. S. Public Health Service will be held at the following places May 5, 1930: Washington, D. C.; Chicago, Illinois; New Orleans, Louisiana; San Francisco, California, and Stapleton, S. I., New York. Candidates must be twenty-three years and not over thirty-two years of age. Requests for information or permission to take this examination should be addressed to the Surgeon General, U. S. Public Health Service, Washington, D. C.

THE Madison County Medical Society held its regular meeting at the Stilwell Hotel, March 18th. Dr. G. S. Bond, of Indianapolis, demonstrated the Cabot records of abnormal heart sounds with a new amplifier of his own invention, and presented a paper on "Diagnosis of Heart Disease." Dr. Wier Wiley discussed the use of the electrocardiograph, and the machine was demonstrated by Dr. F. C. Guthrie. The secretary of the society, Dr. Austin, reports that for the first time in its history the society has a 100 percent rating from the State Association, as every member has paid his dues.

THE Northern Tri-State Medical Association held its fifty-seventh annual meeting April 8th at the Chamber of Commerce Building, Fort Wayne. Speakers included Dr. William P. Finney, of the Mayo Clinic; Dr. Fred Cotton, Boston; Dr. Carl D. Camp, Ann Arbor; Dr. Joseph Brenneman,

Chicago; Dr. Robert M. Moore, Indianapolis; Dr. James H. Mitchell, Chicago; Dr. Edwin W. Ryerson, Chicago; Dr. Charles A. Elliott, Chicago; Dr. Albert E. Sterne, Indianapolis, and Dr. C. W. Waggoner, Toledo. The evening meeting was arranged for both physicians and the general public. Dr. Robert Hoffman, of South Bend, was president of the association for 1929-30.

THE U. S. Civil Service Commission announces open competitive examinations for chief nurse (Indian Service); head nurse (Indian Service); graduate nurse (various services); graduate nurse, visiting duty (various services) and graduate nurse, junior grade (various services). Applications for these positions must be on file with the Civil Service Commission at Washington, D. C., not later than June 30. Examinations are to fill vacancies in the Departmental Service, Washington, D. C., and in hospitals of the Veterans' Bureau, the Public Health Service, and Indian Service throughout the country, also at the Federal Industrial Institution for Women, Alderson, West Virginia.

ARRANGEMENTS have been made for a conducted tour of institutions and clinics in New York, Philadelphia, Boston, Newark, N. J., and New Haven, Conn., in advance of the first International Congress on Mental Hygiene to be held in Washington, D. C., May 5th to 10th. The tour will begin April 28th and end May 4th. There will be two groups, one for those especially interested in hospitals and institutions for mental disease and mental defect, and another group for those interested in mental hygiene and child guidance clinics and schools having facilities for the study and treatment of juvenile behavior problems. Reservations may be made with Mr. John R. Shillady, Administrative Secretary, First International Congress on Mental Hygiene, 370 Seventh Avenue, New York.—*J. A. M. A.*, March 22, 1930.

IN addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the A. M. A.:
United States Standard Products Co.:

Diphtheria Toxin-antitoxin Mixture 0.1 L+ (Nonsensitizing) Prepared from Sheep Serum.

The following articles have been exempted and included with the List of Exempted Medicinal Articles (New and Nonofficial Remedies, 1929, p. 481):

Robert McNeil:

Tincture Digitalis Duo-Test McNeil.

Black Capsules Digitalis Duo-Test McNeil.

INDIANA UNIVERSITY NEWS NOTES

DR. WILLIAM B. BIZZELL, president of the University of Oklahoma, will be the commencement

speaker at Indiana University this year. The baccalaureate speaker will be Dr. Herbert L. Willett, of the University of Chicago.

OWEN WILSON, of Anderson; Ralph Arisman, of Elkhart, and Richard Peters, of Indianapolis, have been pledged to the Phi Chi professional medical fraternity at Indiana University.

DR. A. G. POHLMAN, of the St. Louis University medical school and former professor of anatomy at Indiana University, addressed the hygiene class at Indiana University on March 11th.

ALL medical and pre-medical students of Indiana University recently were entertained with a smoker at the Kappa Delta Rho house. Dr. Paul Dykhuizen, of Indianapolis, addressed the meeting.

EARL RUSSELL BUSH, who received the doctor or of the Western and Southern Life Insurance of medicine degree from Indiana University in 1909, has been appointed associate medical director of the company.

DR. MORRIS FISHBEIN, editor of the *Journal of the American Medical Association*, will deliver the convocation address at Indiana University on Wednesday morning, April 23d. Doctor Fishbein will speak on "Foods, Fads and Follies."

DR. H. T. BRISCOE, of the Indiana University chemistry department, has signed a contract with the D. VanNostrand Publishing Company of New York City, for the publication of his textbook, "Qualitative Chemical Analysis, Theories, Principles and Methods."

THE regional institute for tuberculosis workers, conducted by the National Tuberculosis Association and the Indiana Tuberculosis Association in cooperation with the Indiana University Extension Division, will be held March 24th to April 5th at the classrooms of the Extension Division in Indianapolis.

THE Indiana University graduate school since its beginning in 1907 has shown a growth in enrollment of 759. One hundred and forty students came to the University for advanced degrees when the graduate school opened. This year, the twenty-second after its founding, 899 students have enrolled in the numerous graduate departments.

FOURTEEN Indiana University medical students were initiated into Theta Kappa Psi, medical fraternity, at the Marott Hotel in Indianapolis, Saturday, March 1st. The new members are Allen Hannah, Bloomington; Donald Close, Fort Wayne; Clayton Merrilatt, Fort Wayne; Charles

Thorn, Vincennes; Floyd McCannon, Muncie; Everett Thomas, Leesburg; Courtland Reese, Knightstown; George Petro, Martinsville; John Woner, Sullivan; Herman Rodin, South Bend; John Hillery, Muncie; Russell Baskett, Jonesboro; Elbie Herendeen, Bloomington; and Jesse Ambrose, Anderson.

THE Phi Chi national professional medical fraternity held initiation services Sunday, March 2d, at the Spink-Arms Hotel, Indianapolis, for the following seventeen medical students at Indiana University: Dennis S. Megenhart, Centerpoint; H. Harold Oyer, Wayne R. Glock, Paul L. Stier, and Edmund VanBuskirk, all of Fort Wayne; Kenneth Thornburg and Donald Covalt, Muncie; Robert D. Howell, Greencastle; George R. Held, Lamar; John A. Waller, Newcastle; Avery M. Baker, Orleans; John K. Stewart, Delphi; Frank M. Nichols, LaGrange; Anson G. Hurley, Anderson; Milton J. Miller, Evansville; M. Moore McDowell, Bruceville; and Theodore R. Hayes, Mellott.

DURING the past month Indiana University has received two gifts amounting to \$300,000. A gift of \$200,000 for the endowment of a chair of philosophy was made to Indiana University by James B. Nelson, of Indianapolis. The University has accepted property, consisting mainly of Indianapolis real estate, subject to ninety-nine-year leases, with a valuation of \$200,000, and will administer this property and the funds derived therefrom in perpetuity, as a separate endowment to be designated as "The James B. Nelson Endowment for the Teaching of Philosophy." The second gift was from the estate of the late Rufus Magee, Logansport, former ambassador to Sweden and former state senator and former student of the Indiana University law school. The gift of \$100,000 was made by Miss Margaret Magee, Logansport, and Mrs. Mary Magee Stewart, Chicago, daughters of Rufus Magee. It will be used for the Indiana University law school.

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

February 25, 1930.

Meeting called to order at 4:30 p. m.

Present: Chas. P. Emerson, M.D., acting chairman; J. A. MacDonald, M.D., by proxy, and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held February 18th read and approved.

The release, "The California Cancer Treatment," read and approved for publication Saturday, March 8th.

Radio release Saturday, March 1st, "The California Cancer Treatment."

Requests for speakers:

March 3—Rush County Medical Society, Rushville: "Diphtheria." Speaker obtained.

March 5—Ripley County Medical Society, Osgood: "Spinal Meningitis." Speaker obtained.

March 14—Adams County Medical Society, Decatur:

"Spinal Meningitis." Speaker to be chosen.

Report of medical meeting:

Feb. 24—Jefferson County Medical Society, Madison. "Spinal Meningitis."

Letter received from former councilor of the thirteenth district stating that the *New Carlisle News* was being revived and that the editors would be glad to receive and publish the weekly releases of the Bureau of Publicity of the Indiana State Medical Association. The secretary was instructed to add the *New Carlisle News* to the list of papers which get weekly releases from the Bureau.

Letter received commenting upon editorial that appeared in THE JOURNAL on the subject of "Commercializing Physiotherapy." Secretary was instructed to send this letter to the editor of THE JOURNAL.

Letter received from director of the Division of Infant and Child Hygiene of the State Board of Health.

Letter also received from Winchester, Indiana, asking the Bureau to supply some material for the Randolph Health Education Committee.

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole March 4, 1930.

March 18, 1930.

Meeting called to order at 4:15 p. m.

Present: William N. Wishard, M.D., chairman; Chas. P. Emerson, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held February 25th read and approved.

The release, "Exercise," approved for publication Saturday, March 29th. The release, "Trachoma," was approved for publication on March 15th.

Radio releases:

March 8—"Trachoma."

March 15—"Spring Tonics and Spring Fever."

March 22—"Exercise."

Much material from the director of the Child Hygiene Division of the Indiana State Board of Health brought to the attention of the Publicity Committee and placed in the hands of the chairman for detailed review and report at the next meeting of the Bureau.

Report of medical meeting:

March 3—Rush County Medical Society, Rushville. "Diphtheria."

Requests for speakers:

March 25—Grant County Medical Society, Marion. "Skin Diseases." Speaker obtained.

June 5—Fountain-Warren County Medical Society, Covington. "Toxæmia of Gestation." Speaker to be chosen.

Letter received from the secretary of the Clinton County Medical Society in regard to talk upon the subject of "Electro-Therapy."

Request received from the executive secretary of the Marion County Tuberculosis Association for the use of the radio time of the Bureau during April. Request approved by the Committee. This time is to be used for talks given in connection with the national Early Diagnosis Campaign sponsored by the National Tuberculosis Association during the month of April.

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole March 25, 1930.

INDIANA STATE BOARD OF HEALTH DIVISION OF COMMUNICABLE DISEASES MONTHLY REPORT, MARCH, 1930

The morbidity reports from the health officers of the state during the month do not show any very great change in prevalence over the previous month. There were 3,620 cases of disease reported. Two thousand three hundred two were from the urban population and 1,318 from the rural population. Sixty-four percent of the diseases re-

ported are from the urban population.

Scarlet fever was the most prevalent disease reported. Nine hundred sixty-one cases as compared to 985 the previous month. March is the peak month for scarlet fever. The corresponding month last year 1,456 cases were reported. The estimated expectancy was 834 cases. The estimate is based on the experience of the last seven years.

Measles shows an increase over the previous month. Four hundred ninety-three cases were reported and 256 cases last month. The same month the preceding year 2,337 cases were reported. The disease comes in cycles. Perhaps, this year is the beginning of a new cycle. The peak of a five-year cycle was in 1926 when 6,948 cases were reported during March. It would seem that all the cases for that month were reported, but the rule is not over twenty-five percent of the cases are reported. Absolute quarantine against measles would be seventy percent effective.

Tuberculosis shows a greater number of cases reported this month than any month for the last ten years. Three hundred twenty-eight cases were reported. Every practicing physician in the state is furnished franked cards for reporting their cases direct to the State Board of Health. The mortality reports are greater than the morbidity reports. Here is an example: In the last five years Shelby county reported twenty-six cases of tuberculosis and 129 death certificates of the disease were sent in from that county during the period. The Anti-Tuberculosis Law, Chapter 55, Acts 1915, Section one, sets forth that it shall be the duty of every practicing physician in this state to report the name and address of every person known to him to be infected with tuberculosis, to the health officers of the city, town or county in which such person resides at least five days after such fact comes to the knowledge of the physician. To facilitate the reporting of the disease, the State Board of Health has ruled that the physician can report direct to the State Board of Health and is furnished franked cards for that purpose.

Smallpox shows a slight decrease. Seven hundred eighty-one cases were reported, and 809 cases the preceding month. Three hundred eighty cases the corresponding month the previous year. The knowledge available as regards the efficacy of vaccination, this great number of cases of the disease should not prevail.

Diphtheria. A marked decline is noted. One hundred six cases this month and 146 cases the previous month. Same date last year 142 cases were reported. The estimated expectancy was 159 cases.

Typhoid fever is about at a standstill. Twelve cases were reported this month and thirteen cases the previous month. The same month last year thirty-nine cases were reported. The normal average for March is seventeen cases.

Cerebro-spinal meningitis shows a slight increase over February, eighty-nine cases and seventy cases, respectively. The disease is subsiding in Indianapolis. Thirty-two cases were reported for this month and forty-three cases last month. Lake county reported eighteen cases and Putnam county six cases. Nineteen other counties reported from one case to four cases.

The name and number of diseases reported during the month not mentioned above are as follows: Chickenpox, 460; whooping cough, 205; influenza, 72; pneumonia, 64; mumps, 49 cases.

The Director assisted the Director of Visual Education in an educational campaign on the prevention of diphtheria in Wabash county. Several hundred persons were given the Schick test by the resident physicians. He also helped in giving instructions in the use and value of the Schick test in the city of South Bend. The physicians of South Bend were to follow and give the Schick test.

H. W. MCKANE, M.D.,
Collaborating Epidemiologist.
Indiana State Board of Health.

ST. JOSEPH COUNTY MEDICAL SOCIETY

The St. Joseph County Medical Society held its dinner meeting for the month of February on the 19th, at the Oliver Hotel, with the president, Doctor Geisler, in the chair.

Dr. A. R. Barnes, of the Department of Cardiology of the Mayo Clinic, gave the paper of the evening, entitled "The Heart, with Special Reference to Coronary Occlusion." Doctor Barnes showed lantern slides of dissections of the heart which had been injected previously to bring out the minute ramifications of the arteries and their distributions. Later he showed radio cardiographs of different cases and reported the autopsy findings whenever possible, thus adding another step toward the possible early diagnosis of beginning coronary occlusion.

The paper was discussed by Doctors Giordano, Sensenich, M. W. Lyon, Jr., Gordon, Hoffman, of South Bend, and Doctors Fleming and Warwick, of Elkhart. Fifty-eight members and guests were present.

The St. Joseph County Medical Society met in the Public Library, February 25, 1930, with Doctor Geisler, the president, presiding.

The application of Dr. C. C. Reifeis for membership was referred to the Board of Censors.

The paper of the evening, entitled "Intestinal Obstruction," was presented by Dr. George F. Green, abstract of which follows:

Classification divided into two primary types, according to etiology. First, of nervous origin, such as dynamic and adynamic ileus, including circulatory disturbances; and second, obstruction due to mechanical causes, both inside and outside of the intestinal lumen.

The pathology of the condition varies with the etiology. In general, there is a damming back of fluids, with an accompanying distension of the proximal gut, primarily. This simple process is complicated further in a short time by the formation of gas, probably chiefly due to the presence of *B. Welchii*, as pointed out by Williams. In later stages, there frequently is necrosis of the bowel wall, and the general picture is complicated by the absorption of the toxin which is present in the dammed-up fluid. Orr and Haden and others have shown that the blood chlorides are markedly diminished, the carbon dioxide combining power is increased, and there is marked increase of the blood non-protein nitrogen, due to urea.

The diagnosis of the condition is the most important phase of the discussion, inasmuch as most of the cases can be cured if treatment is instituted soon enough. The cardinal symptoms are pain, nausea, vomiting, and obstipation. There usually is visible peristalsis, and distension. The diagnosis should be made before distension is noticeable, however. It should be remembered that pain ceases when gangrene begins. The use of morphine is absolutely contraindicated, in all cases of abdominal pain, until a diagnosis is made with certainty, and treatment decided upon. Most of the delay seen in these cases in the past can be said to be definitely attributable to the masking of symptoms by this otherwise invaluable drug. It should be remembered that there is usually no fever, little if any leucocytosis, and a normal pulse. The entire picture is different in the later stages, because of toxemia. So-called fecal vomiting is almost a terminal event, and should never be seen if proper care is taken.

Prevention of obstruction should be thought of in all abdominal operations. Tissues should be handled with the utmost gentleness. All raw areas should be peritonealized. Drains should be used sparingly, and should be of the Penrose type in nearly all cases. Hard rubber tubes tend to form adhesions.

The general condition of the patient should be treated before surgery is undertaken. Hypertonic saline and glucose solution should be given intravenously, even at the expense of an hour's delay, to combat the low chlorides and starvation. It has been found that spinal anesthesia, if it is carried to a fairly high level, paralyzes the inhibitor nerves to the intestines, and allows active peristalsis to take place. Occasionally this will be curative in cases of adynamic ileus. If not, it is an excellent anesthetic for the laparotomy.

The surgical procedures are governed entirely by the conditions found. At times, simply freeing an adhesion will be sufficient. An extensive resection may be necessary. If there is much distension it is wise to institute drainage, preferably by the method of Holden, who has had remarkable results by the use of a large enterostomy tube, through which the fluid is evacuated by drawing the proximal intestine through the fingers of the operator, after evisceration. The bowel is closed without drainage after this procedure. If the obstruction is in the colon, a cecostomy is often life saving, followed by a later operation to correct the pathology.

Gas gangrene antitoxin is of value, and should be given in all cases of obstruction to combat toxemia. Frequent gastric lavages are indicated post-operatively. Bile enemata have been advocated, and may be given with some benefit. It is most important to introduce sufficient fluid, either intravenously or subcutaneously as conditions seem to warrant.

It should be emphasized that diagnosis in the early stages of obstruction is essential, that the use of morphine before treatment is decided upon is almost criminal, and that delay is fatal.

Doctor Green's paper was discussed by Doctors Edgar Myers, Stoltz, Terry, M. W. Lyon, Jr., Skillern and Hillman.

Doctor Traver reported on the Medical and Dental Credit Bureau, which has been in existence less than a year. The society gave a vote of confidence to Doctor Traver for what he had accomplished.

The regular meeting of the St. Joseph County Medical Society was held in the Public Library, Tuesday, March 4, 1930, with Doctor Geisler in the chair.

Mr. Raymond Bright, Director of Visual Education of the State Board of Health, outlined the plan of educating the public through the schools and parent-teacher associations on the value of the Schick test and of toxin antitoxin or toxoid immunization against diphtheria. He exhibited the materials used in his talks and showed three reels of moving pictures entitled—

1. Preventing Diphtheria.
2. Health Examination on Your Birthday.
3. Health Twins at Work.

The society arranged to have Schick tests done on all school children provided the parents consented, and to immunize such children as gave positive reactions, provided the parents gave written authorization for the family physician to do this immunization.

The local health board expressed its willingness to furnish free of charge the materials for the Schick test and the diphtheria immunization.

The St. Joseph County Medical Society met in the Public Library, March 11th at 8:30. Doctor Geisler presided.

Doctor Knode reported progress on the proposed tests to be given the school children, the cost of which was to be taken care of by the City Health Department.

The paper of the evening, entitled "Electric Cutting and Coagulation as Applied to Skin Tumors," was read by Dr. C. C. Terry.

"Electric coagulation and cutting is peculiarly well adapted to the eradication or removal of skin tumor. In the care of malignant tumors the method of choice is coagulation followed by electro-surgical excision. This leaves little opportunity for the dissemination of malignant cells into the blood stream because there is no pressure exerted upon the electrode and because all cells coming in contact with the instrument are destroyed. The excision need not extend as far into normal tissue.

"The benign tumors, such as hemangiomas, naevi, papillomas, fibromas, etc., are more easily removed with the electric knife because there is much less hemorrhage.

"No hemorrhage and primary union are, however, diametrically opposed factors and one or the other must be sacrificed. The instruments themselves are of a high frequency type, delivering a cutting or a coagulating current according to the relationship of amperage to voltage and rate of change of direction of the current. The Wappler Endotherm Knife and the Bovie Electro-surgical unit are examples.

"These instruments must be used experimentally and must be well understood before attempting to use them. They offer many advantages but also have great shortcomings."

The paper was discussed by Doctors Skillern, Giordano, Bolling, M. W. Lyon, Jr., Hyde, Green, Geisler, and Baker.

The meeting adjourned at 10:00 p. m. to partake of coffee and doughnuts.

Respectfully submitted,

MARTHA BREWER LYON, M.D.,
Asst. Secretary and Treasurer.

INDIANAPOLIS MEDICAL SOCIETY

March 8, 1930.

The regular meeting of the Indianapolis Medical Society was held on February 11, 1930, at the Indiana University Medical School auditorium. Attendance, 500. The program was arranged by Dr. C. P. Emerson, Dean of

the Medical School. The presentation was made by the visiting and house staff of the University Hospitals. The program was as follows:

1. Bacteriophage:
 1. Complete recovery of badly infected rectal fistula.—Dr. Rice.
 2. Apparent improvement in advanced infection resulting from rectal abscess.
2. Surgical Cases:
 3. } Two cases of extensive cutaneous burns treated by skin grafts.—Dr. Trusler and Dr. Baker.
 4. } Case of empyema of thorax complicated by oesophageal fistula.—Dr. Baker.
 6. Case of benign giant cell sarcoma of the upper end of the humerus.—Dr. Craddock.
 7. Case of recurrent soft renal-vesical calculi.—Dr. Garceau.
 8. Bilateral mastoiditis.—Dr. Robrock.
 9. } Lung abscesses.—Dr. Shattuck.
 10. }
 11. }
 12. Case of sarcoma of tibia with metastasis to the groin.—Dr. Clevenger.
 13. Case of cancer of the stomach, thirteen years after operation; x-ray burn of back.—Dr. Ramsey.
 14. Case of blastomycosis of hand of thirteen years' duration.—Dr. Hadley.
3. Medical Cases—Dr. Billings:
 15. } Two cases of precordial pain, the one due to cardiac pathology, the other to intercostal neuralgia.
 16. }
 17. A case with multiple intercranial lesions.
 18. Syphilis of the stomach.
4. Obstetrical Cases—Dr. Wiseman:
 19. Postcraniotomy.
 20. Pelvic thrombophlebitis.
5. A chemical method for determining drunkenness.—Dr. Harger.

Refreshments were served after the meeting.

The regular meeting of the Indianapolis Medical Society was held at the Athenæum, Tuesday, February 18, 1930, at 8:15 p. m. Attendance, 85. Dr. John A. MacDonald presided.

Drs. Byron K. Rust and N. Cort Davidson were elected to membership. Drs. S. E. Earp and J. C. Anderson were elected to honorary membership.

The president announced the appointment of Drs. Frank Cregor, Paul Hurt and W. D. Little as the Committee on Public Health and Legislation for the year 1930.

Dr. Walter F. Kelly was appointed as a trustee of the Sinking Fund for a period of three years.

The scientific program was as follows:

1. Recklinghausen's Disease—Dr. Norman M. Beatty.
 2. Post-operative Embolism—Dr. Henry S. Leonard.
- Discussion: Drs. William Shimer and Frank Cregor.
- Refreshments were served after the meeting.

The regular meeting of the Indianapolis Medical Society was held at the Columbia Club, Tuesday, February 25, 1930, at 6:30 p. m. This was a dinner meeting. Attendance, 150. Dr. John A. MacDonald presided.

Dr. R. Wesley Scott, of Western Reserve University and the Cleveland City Hospital, was the guest speaker. His subject was "Facts on the Heart—Clinical-Pathological Observations on a Thousand Autopsied Cases."

The regular meeting of the Indianapolis Medical Society was held at the Athenæum, Tuesday, March 4, 1930, at 8:15 p. m. Attendance, 90. Dr. MacDonald presided.

New application: Dr. John T. McCollum.

Application, second reading: Dr. Jesse Martin.

The scientific program was as follows:

1. Brain Tumors—Dr. Murray DeArmond.
2. Dyspituitarism—Dr. A. G. Funkhouser.
3. Acute Abdominal Crisis Following Appendectomy—Dr. C. B. DeMotte.

4. Appendicitis—Dr. J. H. Eberwein.
 5. Tetanus—Dr. E. T. Gaddy.
 6. Paroxysmal Hemoglobinuria—Dr. J. H. P. Gauss.
- Discussion was by Drs. C. D. Humes, Frank Walker, J. A. MacDonald, A. S. Jaeger, H. O. Pantzer, A. E. Sterne, L. D. Carter and John Warvel.

Refreshments were served after the meeting.

CHESTER A. STAYTON, M.D.,
Secretary.

PORTER COUNTY MEDICAL SOCIETY

February 26, 1930.

The Porter County Society met in its regular session Tuesday evening, February 25th. A paper was read by Dr. C. H. DeWitt, of Valparaiso, on "The Chronic Arthritides." He developed the point that the hypertrophic type was always caused by some infection, while the atrophic type usually shows hyperglycemia and nutritional disturbance.

A full diet was advised for both types.

Dr. C. M. Davis, of Valparaiso, was elected to membership. Dr. Cook, of Valparaiso, was reinstated, and Drs. Letherman, of Valparaiso, and Noland, of Kouts, were made honorary members of the society.

Doctor Garner, of Hanna, was a visitor.

G. R. DOUGLAS, M.D.,
Secretary.

JAY COUNTY MEDICAL SOCIETY

The Jay County Medical Society met at the Portland Country Club, Friday, March 7th, in a joint meeting with the dentists. A dinner was served at 6:30 to forty physicians and dentists.

Victor H. Hilgeman, D.D.S., of Fort Wayne, was the principal speaker, his subject being "Extraction and Oral Neoplasms." His talk was illustrated with lantern slides. He indicated that we should be constantly on the watch for malignancies and showed the many evil results of abscessed teeth extracted without the granulomatas being cleaned out.

The paper was discussed by many dentists and physicians.

Respectfully submitted,

B. M. TAYLOR, M.D.,
Secretary.

TIPPECANOE COUNTY MEDICAL SOCIETY

The Tippecanoe County Medical Society met in regular session at the Purdue Memorial Union Building, February 13, 1930. Dinner was served at 6:15 p. m. with thirty-six at the tables. In the absence of the president and vice-president, the senior censor, Doctor Van-Reed, presided.

At the close of the dinner the chairman called the meeting to order. The minutes of the previous meeting were read and approved.

Communications were read and announcements were made, the chief announcement being the trip to Logansport on February 20th at which time Dr. W. F. McBride will read a paper on "Generalism vs. Specialism." Everyone who could was urged to attend the Logansport meeting. Arrangements were left with the secretary.

The auditing committee reported quite favorably on the books of Doctor Hupe for the past year. A letter from the state secretary stated that the entire state joined him in thanking Doctor Hupe for his twenty-five years of efficient and faithful service as treasurer of our county society and hope that he may have twenty-five more years of such service.

Doctor Hupe presented the question of investing the surplus money which the society has. By consent the investing is left with Doctor Hupe to use as he sees best.

Motion was made and carried that a special meeting called for April 24th at which time Doctor Wetherill is to address the society be left to the secretary.

At the close of the business meeting the chairman introduced Prof. B. E. Pontious, of Purdue University, who presented the subject, "Some Applications of the Laws

of Heredity to Man." The subject was presented in a clear and pleasing way by one who understands the subject. While too much of this work is only theory, many things have been proved satisfactorily by men in this field of work. Much valuable thought was stimulated and at the close of the address a live discussion took place.

A rising vote of thanks was extended to Professor Pontious for his timely address.

A bill for \$2.00 for meals was presented and allowed. Motion to adjourn was carried.

March 13, 1930.

The Tippecanoe County Medical Society met in regular session at the Purdue Memorial Union Building. Dinner was served at 6:15 p. m. to a group of fifty-six physicians.

Because of the absence of President McCay, Vice-president R. G. Ikens presided. At the close of the dinner Doctor Ikens called the meeting to order and the minutes of the previous meeting were read and approved. Communications were read, including the advertising of some illegally praised food fadists, urging the membership to be on the lookout for such ads.

The applications of Dr. Ernest S. Baker and Dr. N. B. Combs were read for the first time and referred to the censors.

A bill for \$8.00 for notification cards and one for \$4.00 for extra meals were allowed.

Dr. F. T. Romberger was asked to introduce the speaker, the two having been classmates in the University of Pennsylvania Medical College. Dr. A. M. Mendenhall chose as his subject "The Newer Things in Obstetrics," spending much time on the various preparations used for analgesia and anesthesia in obstetrics. He also spoke of the treatment of some complicated conditions of pregnancy and labor. Doctor Mendenhall spoke for an hour and ten minutes, with a limited discussion following the address.

Everyone felt that Doctor Mendenhall had presented his subject in a very clear and concise way and everyone present enjoyed it immensely. It was the best-attended meeting we have had for a considerable time. Several physicians and the senior class of nurses, chaperoned by Miss MacFarland, from the Home Hospital, attended the address. Physicians were present from Reynolds, Monticello, Delphi and Indianapolis.

A rising vote of thanks was extended Doctor Mendenhall for his splendid address.

Motion to adjourn was carried.

J. C. BURKLE, M.D.,
Secretary.

BOONE COUNTY MEDICAL SOCIETY

On March 5, 1930, the physicians of Boone county met at 6:45 p. m. in the consultation room of the Witham Hospital. After exchanging greetings all adjourned to the dining-room, where a chicken dinner was served.

Following the dinner the group returned to the consultation room, where an attempt was made to reorganize the Boone County Medical Society. Dr. F. S. Crockett, Councilor for the Ninth District, acted as chairman, and also gave an interesting talk on "The Advantages of an Organized County Medical Society." This was followed by a few words from Doctor Romberger, of Lafayette, who assured the Boone county physicians of the cooperation of the Tippecanoe Medical Society. Doctor Wimber-ton also spoke relating experiences he had enjoyed as a younger member of the Tippecanoe Medical Society.

The chairman then called for nominations for officers and the following men were nominated and elected: Dr. R. S. Ball, president; Dr. J. H. Coons, vice-president; Dr. D. VanWoerkom, secretary-treasurer. A motion was passed that Boone County Medical Society thereafter hold its meetings the first Tuesday of each month, at 6:45 p. m. at the Witham Hospital. The president then appointed a program committee consisting of Doctors Rainey and Porter to whom suggestions were given concerning the nature of the future meetings.

There being no other business, the meeting was adjourned to become informal, during which time the expression of opinions favored a very active future for Boone County Medical Society.

DANIEL VANWOERKOM,
Secretary.

BOOK REVIEWS

RADIUM IN GENERAL PRACTICE. By A. James Larkin, M.D., radium consultant on staffs of Wesley Memorial, German Evangelical Deaconess, John B. Murphy and Washington Park Community Hospitals, Evanston; instructor in dermatology (radium) Northwestern Medical College. 304 pages, with 28 illustrations. Cloth. Price \$6.00. Paul B. Hoeber, Inc., New York, 1929.

This work was intentionally written in a brief, simple manner, avoiding technicalities, so that the busy practitioner can refer to the comparative possibilities of radium therapy. An effort is made to furnish up-to-date data on radium technique contra-indications, reactions and prognosis in lesions commonly treated by this agent. A digest is given of reports on the use of radium so that its value as a therapeutic agent can be evaluated. Each disease amenable to radium treatment is taken up individually and technique, reaction and prognosis given, accompanied by a voluminous bibliography. Altogether this is quite a valuable work and should be on the shelves of every busy practitioner.

B. W. R.

CLINICAL OBSTETRICS. By Paul T. Harper, Ph.B., Sc.D., F.A.C.S., Fellow of the American Association of Obstetricians, Gynecologists and Abdominal Surgeons, and of the New York Obstetrical Society, Clinical Professor of Obstetrics of Albany Medical College, Regional Consultant in Obstetrics, New York State Department of Health. Illustrated with 84 plates of engravings with legends and charts. Cloth, \$8.00. F. A. Davis Co., Philadelphia, 1930.

The author emphasizes that this book on obstetrics is not a textbook but rather a clinical application of previously accumulated knowledge.

The reader is presumed to have mastered the fundamentals of obstetrics and is expected to use this book principally in reinforcing his diagnostic acumen. Not so much is said about treatment, as much obstetric treatment is routinized and almost prescribed by the diagnosis. Mechanism of labor is discussed with clearness and conciseness. The author has dwelt at length on the differentiation between contraction ring and "retraction" ring dystocia and probably over-emphasizes this detail. The newer things in obstetrics such as rectal analgesia, glucose treatment in toxemia, prophylactic forceps, etc., have been given proper consideration. Many old facts are rehearsed but in a new style.

The author offers no actual photographs or drawings. The book is replete with many full pages of illustrations or graphs which the author offers in explanation of many points in obstetrics. In many instances these graphs are introduced to clarify points in the accompanying text, but the graphs themselves are often complicated and not very clear.

No bibliography is submitted. In other words, one is to draw that the contents of the book represent the author's ideas and no effort is made to submit proof by other authors.

A. M. M.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

MEAD'S VIOSTEROL IN OIL 100 D.—A brand of viosterol in oil 100 D, N. N. R. (*Jour. A. M. A.*, Aug. 31, 1929, p. 693). Mead, Johnson & Co., Evansville, Indiana.

LENIGALLOL-ZINC OINTMENT.—It contains lenigallol (*Jour. A. M. A.*, April 6, 1929, p. 1181) six percent in a base composed of zinc oxide ointment-U.S. P. E. Bilhuber, Inc., New York.

TYPHO-SEROBACTERIN-MULFORD (SENSITIZED TYPHOID

VACCINE) (NEW AND NONOFFICIAL REMEDIES, 1929, p. 384).—This product is also marketed in packages of three syringes, being three immunizing doses. H. K. Mulford Co., Philadelphia.—(*Jour. A. M. A.*, February 1, 1930, p. 339).

FOODS

The following products have been accepted as conforming to the rules of the Committee on Foods of the Council on Pharmacy and Chemistry of the American Medical Association. These products are approved for advertising in the publications of the American Medical Association, and for general promulgation to the public:

JUNKET (The Junket Folks, Chr. Hansen's Laboratory, Inc., Little Falls, New York).—To prepare the product the dried blown or dried salted rennets in ordinary salt brine is extracted. The enzyme is then precipitated by salting to saturation and the resulting precipitate is mixed with pure Worcester salt, dried and pressed into tablets. Flavored Junket consists of rennet powder, similar to that used for Junket Tablets, except that this is mixed with cane sugar and natural flavoring. While the rennin enzyme itself does not add to the fuel value of milk, it makes it more wholesome because of its digestive action on the milk.

SPINTRATE (SPINACH CONCENTRATE) (Spinach Products Co., Inc., Norfolk, Va.).—Spinach in the form of a fine powder made from fresh spinach of the Savoy or curly leaf type. Spinrate is an excellent source of food iron, calcium, and phosphorus; it is also a rich source of vitamin A, B (B₁) and G (B₂).

WHITEFIELD GENUINE GRAPEFRUIT JUICE (Whitefield Citrus Corporation, Long Island City, New York).—(This is pure undiluted juice of sun-ripened grapefruit and contains no added preservatives. The process of manufacture preserves the original character of the juice.

WHITEFIELD GENUINE ORANGE BUTTER (Whitefield Citrus Corporation, Long Island City, New York).—This is an orange preserve with a new and different flavor and consistency made from tree-ripened fruit.

AUNT JEMIMA PANCAKE FLOUR (The Quaker Oats Co., Chicago).—The product is a mixture of four flours—wheat, corn, rye, rice—with sugar, milk, baking powder and salt.

AUNT JEMIMA BUCKWHEAT, CORN AND WHEAT FLOUR (The Quaker Oats Co., Chicago).—This is a buckwheat, corn and wheat flour.

QUAKER CRACKELS (The Quaker Oats Co., Chicago).—This is composed of corn, wheat and oats.

QUAKER QUICK MACARONI (The Quaker Oats Co., Chicago).—This is a new-type macaroni. A milk containing macaroni that cooks in five minutes instead of twenty.—(*Jour. A. M. A.*, February 8, 1930, p. 411).

BORDEN'S EVAPORATED MILK (The Borden Co., New York City).—It has the following average composition: fat, 7.85%; protein, 6.88%; carbohydrates, 9.67%; ash, 1.55%; total solids, 25.95%; water, 74.05%. The product is manufactured from whole milk. Borden's Evaporated Milk is advertised for infant feeding and for household use in making milk convenient for cooking. It is claimed that the milk is clean and sterile; that it resembles breast milk in ease of digestion; and that it produces fine, flocculent curds.

CREAM OF WHEAT (Cream of Wheat Co., Minneapolis).—It is a product made entirely from wheat. It consists of the endosperm of the wheat, with only so much of the bran and germ as it is impossible to remove. The product is used because it is rich in energy content and easily digested.

GERBER'S STRAINED VEGETABLE PRODUCTS (Gerber Products Division, Fremont Canning Co., Fremont, Mich.).—Brands: Gerber's Strained Spinach, Strained Carrots, Strained Green Beans, Strained Peas, Strained Prunes, Strained Tomatoes and Strained Vegetable Soup. Specially selected vegetables, steam pressure cooked and sterilized at high temperature. It is claimed that by excluding air and cooking under steam pressure without water, a greater conservation of mineral salts and vitamin elements is effected.

THE NEW PETTIJOHN'S (The Quaker Oats Co., Chicago).—This product consists of the whole wheat grain. It is obtained by steaming and flaking wheat which has a tender bran, the bran being included in unground form. The product contains all the nutritive elements of whole wheat.

POST'S BRAN FLAKES WITH OTHER PARTS OF WHEAT (Postum Co., Inc., Battle Creek, Mich.).—The product is composed of bran flakes with other parts of wheat, flavored with malt syrup and salt. It combines the advantages of wheat bran in a nourishing and appetizing food.—(*Jour. A. M. A.*, February 15, 1930, p. 485).

MUFFETS (IRRADIATED) (Quaker Oats Co., Chicago).—Whole wheat, cooked, crushed, drawn out to filmy ribbon of wheaten threads. Wound round and round, baked and toasted. Muffets (Irradiated) makes vitamin D available in a breakfast food for all ages except infants. It is not intended as a therapeutic agent to supplement cod liver oil.

QUAKER FARINA (IRRADIATED) (The Quaker Oats Co., Chicago).—Farina passed under the rays of ultraviolet lamps until it acquires vitamin D. The product will improve calcium and phosphorus retention. It holds its irradiation under extreme conditions of cooking and storing.

QUAKER PUFFED RICE (Quaker Oats Co., Chicago).—This product consists of rice kernels puffed to eight times normal size, providing for easy assimilation and retaining important food elements.

QUAKER MILK SPAGHETTI (The Quaker Oats Co., Chicago).—The product is made from whole milk and wheat.—(*Jour. A. M. A.*, February 22, 1930, p. 559).

PROPAGANDA FOR REFORM

ANTIUSTIO NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that Antiustio is claimed by the manufacturer, Frederick Laboratory, Toledo, Ohio, to be "The greatest burn remedy in existence." A circular contains the following indefinite and nonquantitative statement of composition: "FORMULA Solvent Solution of Plumbic Materials Subnitrate of Bismuth Zinc Sulphate and Iodide of Lead combined with mineral waxes." From this and other statements it would appear that Antiustio is a petrolatum-paraffin mixture claimed to contain 5 percent of bismuth subnitrate along with small but undeclared amounts of zinc sulphate and lead iodide. The Council found Antiustio unacceptable for New and Nonofficial Remedies because it is an unscientific preparation marketed with an inadequate statement of composition, under a name which is not descriptive of its composition, and with claims that are exaggerated and unwarranted. (*Jour. A. M. A.*, November 16, 1929, p. 1559.)

UNGUENTUM CARBONIS COMP. (HILF) NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that Unguentum Carbonis Comp. (Hilf) is marketed by the Hilf Products Co., Brooklyn, and that it is claimed to contain an alcoholic extract of crude coal tar, representing from 2 to 2.5 percent of "its active constituents", menthol and thymol, each $2\frac{1}{2}$ grains to the ounce; eucalyptol, 5 minims to the ounce; salicylic acid, 2 percent; in a base consisting of kaolin and "boroglyceride" (equivalent to 10 percent of boric acid). The Council declared Unguentum Carbonis Comp. (Hilf) unacceptable for New and Nonofficial Remedies because it is a needlessly complex and therefore unscientific mixture which is marketed with unwarranted therapeutic claims and under a name which is insufficiently descriptive of its composition. (*Jour. A. M. A.*, November 23, 1929, p. 1649.)

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the Food, Drug and Insecticide Administration of the United States Department of Agriculture which enforces the Federal Food and Drugs Act: Rising Mist Salve (Wynn's Rising Mist Company) essentially petrolatum with small amounts of menthol, camphor and oils of wintergreen

and eucalyptus. Grains of Health (Grains of Health Products Company) consisting essentially of roasted coffee, with chicory and some starchy material. Taylor's Laxative Cold Tablets (C. E. Jamieson and Company) containing about 1 grain of acetanilide and 1/10 grain of cinchonine salicylate, with camphor, red pepper and some laxative plant drug extractives. Uterine Catholicon (The Graefenberg Company) a liquid containing over 11 percent of alcohol, together with potassium sulphate and extracts of plant drugs, including aloe. Hermance's Asthma and Hay Fever Medicine (C. A. Bell) consisting of potassium iodide with extracts of plant material, including licorice and the alkaloids of lobelia, all in alcohol and water. Draper's Rub (The Memphis Chemical Company) an ointment having a fatty base, containing menthol, camphor, turpentine and wintergreen. Laxa-Pirin (The Hoosier Remedy Company) each tablet containing about 1 grain of phenacetine, 2 grains of aspirin, a small amount of caffeine, a trace of aconite alkaloids and some laxative plant drug extractives. Nash's Croup and Pneumonia Salve (Nash Bros. Drug Company) consisting essentially of petrolatum, with the usual amounts of menthol, camphor, sassafras and turpentine. (*Jour. A. M. A.*, November 30, 1929, p. 1751.)

HERNIAL (INYECCIONES PROLIFERANTES OBTURADORAS DEL DR. E. PINA MESTRE) NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that the product, "Inyecciones Proliferantes Obturadoras," stated to be manufactured by Dr. E. Pina Mestre, of Barcelona, Spain, was presented to the Council for consideration under the name "Hernial" by the Vincent Ruiz Co., New York. According to the information submitted by this firm, "Each ampule contains approximately ninety-eight percent of alcohol, and the balance consists of the following ingredients expressed in percentages: 25% Krameria, 16% Katechu, 15% Rosa Canina, 15% Rosa Centifolia, 14% Vaccinium Myrtillus, 15% Moneisia." The preparation is proposed for use by injection in the treatment of hernia. The Council declared Hernial (Inyecciones Proliferantes Obturadoras del Dr. E. Pina Mestre) unacceptable for New and Nonofficial Remedies because it is an unscientific, indefinite and complex mixture of astringent drugs proposed for use in the treatment of hernia, for which unwarranted claims are advanced and the use of which is not warranted by the available evidence but, on the contrary, is considered to be dangerous.—(*Jour. A. M. A.*, February 1, 1930, p. 339).

PINNECKSIN NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that "Pinnecksin," according to the label, is a "Laxative" and "Stomachic," and that, according to International Food Products, Inc., the importers of the preparation, "The originator of this medicine claims for same according to original recommendations said to be in his personal possession and given by some of the foremost liver and stomach specialists of Germany, that this medicine of his would without doubt cause a thoro elimination of gallstones without a surgical operation, he furthermore claims that his medicine would prove of great benefit in the treatment of most any sort of intestinal ailment outside of cancer or ulcer." The importer states that the preparation is a compound of extracts of "32 roots and herbs." The Council found Pinnecksin unacceptable for New and Nonofficial Remedies because it is a complex mixture representing aromatic, bitter and cathartic drugs in undeclared amounts which is offered under a noninforming name, with unwarranted therapeutic claims which may lead to its ill-advised and harmful use by the public.—(*Jour. A. M. A.*, February 1, 1930, p. 339).

THE FEMALE SEX HORMONE.—At the thirteenth International Congress of Physiology in Boston, held in August, 1929, E. A. Doisy announced for the first time the isolation of the female sex hormone in crystalline form. Subsequently, A. Butenandt announced that he, too, had isolated the hormone of the female sex glands in chemically pure crystallized form. In an article describing the product, Butenandt completely ignores the

Doisy announcement. Butenandt points out that the substance is free from nitrogen and sulphur, and that it has no connection with protein substances and carbohydrates. In his opinion, a chemical analysis may make it possible to produce the hormone synthetically. As might have been anticipated, the German investigator promptly conferred on his product a trade name controlled through a German manufacturer. Doisy, aided by the Council on Pharmacy and Chemistry, will no doubt choose a scientific name suitable to the nature of the product and to American conditions.—(*Jour. A. M. A.*, February 1, 1930, p. 341).

NEW TREATMENTS FOR CANCER.—In a letter Walter B. Coffey and John D. Humber outline their work in connection with an experimental method of treating cancer which involves the injection of extracts of the suprarenal cortex. The work is in the earliest of experimental stages and hardly sufficient on which to base definite claims. The claims of Drs. Coffey and Humber have, like those of most investigators, been exaggerated in current reports.—(*Jour. A. M. A.*, February 1, 1930, p. 343).

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the Food, Drug and Insecticide Administration of the U. S. Department of Agriculture, which enforces the Federal Food and Drugs Act: Lunge Heala (Norwich Pharmacal Company), consisting essentially of compounds of ammonium, calcium, sodium, potassium and phosphorus, with chlorides, tar, traces of menthol and chloroform and extracts of plant drugs, including wild cherry, together with alcohol, sugar and aromatic substances. Armistead's Ague Tonic (W. M. Akin Medicine Company), consisting essentially of quinine sulphate, extract of plant drugs, sugar, alcohol and water, flavored with cinnamon. Merle's Cod Liver Oil Tablets (Devore Manufacturing Company), containing metallic iron, zinc compounds, phosphides, berberine, strychnine and a small amount of fish oil. Laxative Anti-Gripine (Anti-Gripine Company), consisting essentially of acetanilid (215.8 grains per ounce), sodium salts, carbonates, red pepper, podophyllin, aconite alkaloids and extracts of plant drugs, including a laxative. Arkadin, consisting essentially of creosote, menthol, benzoate of soda, quaiacol, phenol, mydriatic alkaloids, sugar, alcohol and water. Cod-Liver Oil Compound Tablets (Morgenstern Company), containing iron and zinc compounds, strychnine, extracts of plant drugs, including ginger, and a laxative drug with a trace of fish oil. Broncil (Modern Products Company), consisting essentially of ammonium chloride, menthol, tolu balsam, oil of eucalyptus, extracts of plant drugs, including wild cherry, tartar emetic, sugar and alcohol. Jarabe Compuesto Cocillana Tropical (American Tropical Remedy Company), consisting essentially of an extract of a plant drug, menthol, alcohol, sugar and water. McK & R Cold and Grippe Tablets (McKesson & Robbins, Inc.), containing acetanilid, cinchonidine, hydrobromide, camphor, aloin and a laxative plant drug extractive. Amber-O-Latum (Amber-O-Latum Company), consisting essentially of an ointment with a lanolin and petrolatum base, containing oil of wintergreen, oil of mustard, camphor and eucalyptus. Griperol (Gabriel J. Fajardo), consisting essentially of ammonium, hypophosphites, chlorides, cod liver oil extract, menthol, tar and other pine products, alcohol, sugar and water. Mack's Cold Capsules (S. Pfeiffer Manufacturing Company), containing acetanilid, quinine, sodium and potassium compounds, bromides, methyl salicylate and aloin. La Flugo Cold Tablets (Lincoln Pharmacal Company), containing calcium and sodium salts, sulphates, camphor, oleoresin of capsicum, traces of the alkaloids of ipecac and aconite, and extracts of plant drugs. B. B. Headache Powders (Bostwick Bros.), containing 3.3 grains of acetanilid, each, with aspirin, potassium bromide and caffeine. Mintol Vapocream, an ointment with a petrolatum base, containing carbolic acid, formaldehyde, peppermint and eucalyptus oils, camphor and menthol. Ru-Bon No. 1 (Ru-Bon Chemical Company), consisting essentially of chrysarobin,

ether, alcohol and water. Ru-Bon No. 2 (Ru-Bon Chemical Company), consisting essentially of chrysarobin, salicylic acid, resorcin, glycerin, volatile oils, alcohol and water. Ru-Bon No. 3 (Ru-Bon Chemical Company), containing resorcin, salicylic acid, chrysarobin, volatile oils, glycerin, alcohol and water.—(*Jour. A. M. A.*, February 1, 1930, p. 357).

CEANOTHYN NOT ACCEPTABLE FOR N. N. R.—In 1926 the Council on Pharmacy and Chemistry found Ceanothyn (Flint, Eaton & Co.) unacceptable for New and Nonofficial Remedies because its composition was uncertain, because no tests were furnished to control its uniformity and identity, and because no satisfactory evidence for its therapeutic value had been submitted. Later the firm requested reconsideration of the product, submitting as evidence reports of experimental and clinical studies carried out with Ceanothyn. The firm also submitted new advertising in which it is stated that each lot is physiologically tested and that this insures a uniform product, but no acceptable evidence to support this claim was furnished. A "blind test" made for the Council gave no satisfactory evidence that Ceanothyn changes the clotting time of the blood. In consideration of the unestablished and therefore unwarranted therapeutic claims for Ceanothyn, and in further consideration of the inconclusive character of the available evidence for the drug's value as a coagulant, the Council confirmed its decision holding the product unacceptable for New and Nonofficial Remedies.—(*Jour. A. M. A.*, February 8, 1930, p. 410).

VIGANTOL NOT ACCEPTABLE FOR N. N. R.—When reports of experimental clinical studies made it apparent that irradiated ergosterol preparations would be offered for therapeutic use, the Council on Pharmacy and Chemistry undertook to select a name for this vitamin D bearing product. The Council did this so that products of this kind might be marketed under a single name and thus the confusion avoided which inevitably results when the same product is marketed under a multiplicity of names. The Council adopted "Viosterol" as the New and Nonofficial Remedies name for irradiated ergosterol and the name "Viosterol in oil 100 D" to designate a preparation containing the substance dissolved in oil and having one hundred times the vitamin D potency of a standard cod liver oil. Four firms have made their products acceptable under the Council name for inclusion in New and Nonofficial Remedies. The Winthrop Chemical Co. is offering to physicians of the United States a brand of viosterol in oil 100 D under the proprietary name "Vigantol." The Council declared "Vigantol" unacceptable for New and Nonofficial Remedies because the application of a proprietary name to a preparation of irradiated ergosterol is contrary to the best interest of the medical profession and of the public.—(*Jour. A. M. A.*, February 8, 1930, p. 410).

THE TWENTY-FIFTH ANNIVERSARY OF THE COUNCIL ON PHARMACY AND CHEMISTRY.—At a meeting held February 3, 1905, the Board of Trustees of the American Medical Association created an advisory board to be known as the Council on Pharmacy and Chemistry. The organization of this Council was perfected on February 11, 1905. Thus the Council on Pharmacy and Chemistry passes the twenty-fifth year of its organization and continues, in a second quarter century, one of the most notable works for scientific medicine ever accomplished by any organized group. It is significant that several of the original members of the body have maintained their connection since its inception and that the secretary, W. A. Puckner, has rendered continuous service as a full-time officer for the body from the first. The Council could not have achieved what it has without the support of the medical profession of our country. Thus, with the establishment of the Council, the advertising of medicinal preparations in the *Journal of the American Medical Association* was limited to those products that had been passed by the Council. The same rule has applied to the other publications of the Association, and finally every state medical journal, except those of Illinois and New

York, followed this lead. A considerable number of journals not controlled by medical societies also give their support to the Council's work. The medical profession must support the Council or its work will be futile. The members of the Council serve without remuneration and the *Journal of the American Medical Association* tenders to them the thanks and appreciation of the profession that they have so well served.—(*Jour. A. M. A.*, February 8, 1930, p. 413).

VITAMIN D IN TUBERCULOSIS.—A recent investigation of the role of vitamin D in the management of tuberculosis indicated that the administration of viosterol did not produce any detectable acceleration of the healing process. These observations suggest that such value as cod liver oil possesses in tuberculosis does not depend on its relatively high concentration of vitamin D. These studies emphasize the fact that cod liver oil possesses more than one claim to nutritive value, for it is even richer in vitamin A than in the antirachitic factor. In spite of the enormous antirachitic potency of viosterol, this material is by no means to be regarded as therapeutically equivalent to cod liver oil.—(*Jour. A. M. A.*, February 8, 1930, p. 414).

THE COMMITTEE ON FOODS.—More than a hundred products, representing the products of numerous manufacturers, have been submitted to the committee, in addition to several national advertising campaigns by cooperative marketing organizations. This cooperation is welcomed by the committee, but obviously has thrown a great burden of work on the committee at the start. Manufacturers have greeted with acclaim the permission to use on packages and in advertising the seal of the committee. Whereas less food is eaten, so far as concerns caloric or energy value, foods have been greatly modified to improve palatability and to provide what are recognized as necessary ingredients in the form of vitamins and mineral salts. It is the hope of the committee that its efforts will give stability to a rapidly growing industry and prevent the sinking of the modern food market in a morass of hokum such as engulfed the drug industry in its developing stages.—(*Jour. A. M. A.*, February 8, 1930, p. 415).

VIGANTOL NOT ACCEPTED.—"Viosterol" is the name adopted by the Council on Pharmacy and Chemistry for irradiated ergosterol, and "viosterol in oil 100 D" for a solution in vegetable oil having one hundred times the antirachitic potency of a standard cod liver oil. All of the firms licensed by the University of Wisconsin Foundation to prepare this preparation have agreed to cooperate with the Council on Pharmacy and Chemistry, by using this name, except the Winthrop Chemical Company. The Winthrop Chemical Company has determined to call its product "Vigantol," notwithstanding the fact that the Council has declared that the application of such a proprietary name is contrary to the best interests of the medical profession and the public. The medical profession must support the Council in this type of work if the Council's efforts are to be effective.—(*Jour. A. M. A.*, February 8, 1930, p. 415).

MISBRANDED PHARMACEUTICALS.—During 1929 Notices of Judgment were issued by the Food, Drug and Insecticide Administration of the U. S. Department of Agriculture against the following pharmaceutical products that were found adulterated or misbranded—or both—under the Food and Drugs Act: Spirits of Nitre (W. H. Crawford Company, Baltimore, Md.). Damiana Herb (S. B. Penick & Co., Inc., New York City). Alterative Tablets (P. H. Mallen Company, Chicago). Combination Tablets (P. H. Mallen Company, Chicago). Pituitary Extract (Pharmaceutical Products Company, Inc., Easton, Md.). Phenolphthalein Compound Tablets (P. H. Mallen Company, Chicago).—(*Jour. A. M. A.*, February 8, 1930, p. 428).

EFDROH HART NASAL JELLY. EfeDroN Hart Nasal Jelly is another one of the ever-increasing ephedrine proprietaries. The preparation is made by the Hart Drug Corporation, Miami, Florida. According to the label the formula is: Ephedrine hydrochloride Gr. 1; Chlorbu-

tanol Gr. $2\frac{1}{4}$; Sodium Chloride Gr. $2\frac{1}{4}$ Menthol Gr. 3; Phenol Gr. 2; Oil of Cinnamon Gr. 0.08; Jelly base q. s. ad drachms 5. The preparation has not been accepted for New and Nonofficial Remedies. While physicians' samples of this product have been liberally distributed, the carton is one which seemingly is addressed to the public as well.—(*Jour. A. M. A.*, February 8, 1930, p. 430).

FARASTAN NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that Farastan is the name under which the Farastan Co., Philadelphia, markets a preparation of iodine and cinchophen claimed to be mono-iodo-cinchophen. The preparation is recommended for use in "Arthritis . . . Rheumatoid and Neuritic conditions." The Council reports that there is no evidence that the routine use of cinchophen and iodide in fixed proportions (or in any proportions) is desirable or rational. Usually, the conditions that require cinchophen do not require the simultaneous administration of the iodides, and vice versa, and that it appears particularly undesirable and even dangerous to encourage the routine prescribing of cinchophen, which should be used only for short periods, with an iodide compound, which must be continued over long periods. The Council declared Farastan unacceptable for New and Nonofficial Remedies because it is an irrational preparation marketed with unwarranted therapeutic claims.—(*Jour. A. M. A.*, February 15, 1930, p. 484).

ANTISTREPTOCOCCUS SERUM OMITTED FROM N. N. R.—The Council on Pharmacy and Chemistry reports that for some years it has been questioning the value of antistreptococcus serum preparations. In 1928 the Council decided that unless new and favorable evidence became available, all streptococcus serum preparations would be omitted from New and Nonofficial Remedies with the close of 1929. Since no such new evidence has become available, the Council has omitted all antistreptococcus serum preparations as follows: Antistreptococcic Serum (Gilliland Laboratories, Inc.); Antistreptococcic Serum, Polyvalent (Lederle Antitoxin Laboratories); Antistreptococcic Serum (Eli Lilly & Co.); Antistreptococcic Serum, Purified and Concentrated (Lilly); Antistreptococcic Serum, Polyvalent (H. K. Mulford Co.); Antistreptococcic Serum (National Drug Co.); Antistreptococcic Serum (Parke, Davis & Co.); Antistreptococcic Serum-Squibb.—(*Jour. A. M. A.*, February 15, 1930, p. 484).

MISBRANDED PHARMACEUTICALS.—During 1929 Notices of Judgment were issued by the Food, Drug and Insecticide Administration of the U. S. Department of Agriculture against the following pharmaceutical products that were found adulterated or misbranded—or both—under the Food and Drugs Act: Blaud's Modified Tablets (Pharmaceutical Products Company, Inc., Easton, Md.). Chloramine-T Tablets (Smith-Dorsey Company, Lincoln, Neb.). Creosote Compound Mixture (Charles Killgore, New York City). Sirup of Ipecac (William R. Warner & Company, Inc., New York City). Tincture of Belladonna Leaves (Frank G. Scott, Detroit, Mich.). Hyoscyamus (Henbane Leaves) (McIlvaine Bros., Inc., New York City). Calomel Tablets (Frank G. Scott, Detroit, Mich.). Calomel and Phenolphthalein Tablets (Pharmaceutical Products Company, Inc., Easton, Md.). Sodium Bicarbonate (James Good, Inc., Philadelphia). Morphine Sulphate Tablets (Frank G. Scott, Detroit, Mich.). Morphine and Atropine Tablets (Smith-Dorsey Company, Lincoln, Neb.). Codeine Sulphate Tablets (Frank G. Scott, Detroit, Mich.). Aletris (Unicorn Root) (Sig. Wallace, Statesville, N. C.). Rheumatism Tablets (P. H. Mallen Company, Chicago). Spigelia (Pink Root) (R. Hillier's Son Company, Inc., Jersey City, N. J.). Cinchophen Tablets (Pharmaceutical Products Company, Inc., Easton, Md.). Citrated Magnesia (New England Magnesia Company, Boston, Mass.). Acetphenetidin Tablets (Pharmaceutical Products Company, Inc., Easton, Md.). Tincture of Aconite (Pharmaceutical Products Company, Inc., Easton, Md.). Tincture of Iodine (George A. Breon & Company, Kansas City, Mo.).

Citrated Magnesia (Philadelphia Magnesia Company, p. 501).

UDGA STOMACH TREATMENT.—The formula of Udga is, apparently, secret—at least none of the advertising Philadelphia).—(*Jour. A. M. A.*, February 15, 1930, matter and follow-up letters give it. The Udga Medicine Company, which puts up this preparation, was formerly known as the Phungen Laboratories. The preparation is advertised as a mail-order treatment for stomach ulcer, gastritis and dyspepsia. From tests made in the A. M. A. Chemical Laboratory it appears that the preparation is similar in composition to the Pfunder Stomach Tablets, which were found to contain bismuth subnitrate, magnesium oxide and sodium carbonate.—(*Jour. A. M. A.*, February 15, 1930, p. 504).

THE COFFEY-HUMBER CANCER TREATMENT.—The publicity, given through Hearst newspapers primarily, to the Coffey-Humber cancer treatment has brought about the very type of injury to scientific research that was predicted. Regardless of the fact that Doctors Coffey and Humber have made it clear that their work is purely experimental and that they do not claim to have developed a cancer cure, the great trek of cancer sufferers across the continent has begun and physicians everywhere are besought by their patients to procure this remedy.—(*Jour. A. M. A.*, February 22, 1930, p. 562).

THE HAZARD OF USING NONACCEPTED DRUGS.—Recently the A. M. A. Chemical Laboratory published a report on bichloridol collapsules indicating that only from one-tenth to one-fifth of the amount of mercuric chloride claimed to be present was actually discovered. The results of the A. M. A. Chemical Laboratory has received independent confirmation. Apparently most of the mercuric chloride had reacted with the lining of the collapsule and was not in the medicament itself. This product has been administered to patients by physicians who thought that they were giving a certain dosage of mercuric chloride, whereas the patient received only from one-tenth to one-fifth of the dose he should have had. In 1925, the Council on Pharmacy and Chemistry declared Bichloridol nonacceptable for New and Nonofficial Remedies. It is safer to follow the Council!—(*Jour. A. M. A.*, February 22, 1930, p. 563).

MISBRANDED PHARMACEUTICALS.—During 1929 Notices of Judgment were issued by the Food, Drug and Insecticide Administration of the U. S. Department of Agriculture against the following pharmaceutical products that were found adulterated or misbranded—or both—under the Food and Drugs Act: Marjoram (R. T. Randall & Company, Philadelphia). Ergot (King & Howe, New York City). Sodium salicylate Tablets (William R. Warner & Company, Inc., New York City). Strychnine Sulphate Tablets (William R. Warner & Company, Inc., New York City). Sodium Salicylate Tablets (Shores-Mueller Company, Cedar Rapids, Ia.). Strychnine Sulphate Tablets (P. H. Mallen Company, Chicago). Tincture of Nux Vomica (William R. Warner & Company, Inc., New York City). Strychnine Sulphate Tablets (Frank G. Scott, Detroit, Mich.). Atropine Sulphate Tablets (Pharmal Products Company, Inc., Easton, Md.). Nitroglycerin Tablets (Frank G. Scott, Detroit, Mich.). Nitroglycerin Tablets (Pharmal Products Company, Inc., Easton, Md.). Bacillus Bulgaricus Tablets (Fairchild Bros. & Foster, New York City). Bacillus Bulgaricus Tablets (Fairchild Bros. & Foster, New York City). Bacillus Bulgaricus Liquid Culture and Tablets (Parke, Davis & Company, Detroit, Mich.). Phenacetine Tablets (P. H. Mallen Company, Chicago). Cocaine Hydrochloride Tablets (Pharmal Products Company, Inc., Easton, Md.). Arsenous Acid Tablets (Pharmal Products Company, Inc., Easton, Md.). Quinine Sulphate Tablets (Pharmal Products Company, Inc., Easton, Md.). Tincture of Cinchona Compound (Pharmal Products Company, Inc., Easton, Md.). Calcium Lactate Tablets (Smith-Dorsey Company, Lincoln, Neb.). Heart Sedative Tablets (P. H. Mallen Company, Chicago). Potassium Bromide Tablets (Smith-Dorsey

Company, Lincoln, Neb.).—(*Jour. A. M. A.*, February 22, 1930, p. 577).

WHERE IS THE BICHLORIDE IN "BICHLORIDOL"?—R. N. Harger reports that he has confirmed the report of the A. M. A. Chemical Laboratory that Bichloridol collapsules do not contain the amount of mercury claimed. The specimens which he examined contained even less than those reported on by the Laboratory. He found that most of the mercury had combined with the container. The A. M. A. Chemical Laboratory reports that letters received by physicians from the Duke Laboratories, who market the Bichloridol collapsules, in which the firm claims that the findings of the Laboratory are erroneous. That this claim is untrue is shown by the confirmatory analysis of R. N. Harger and by other reports which have been forwarded to the Laboratory.—(*Jour. A. M. A.*, February 22, 1930, p. 579).

VIOSTEROL OR IRRADIATION.—If rickets is the disorder that is to be cured or averted, both cod liver oil and irradiated ergosterol, the latter now available as viosterol in oil 100 D, act as specifics; so that irradiation with artificial light sources is not essential though its effectiveness to accomplish the same ends deserves emphasis. Viosterol also serves to promote the proper metabolism of calcium and phosphorus in other disorders. On the other hand, irradiation with ultraviolet rays doubtless produces a variety of physiologic effects about which we are still largely uninformed.—(*Jour. A. M. A.*, February 22, 1930, p. 580).

AMPOULE NO. 61 SODIUM SALICYLATE 15½ GRAINS, AMPOULE NO. 59 SODIUM IODIDE 15½ GRAINS, AMPOULE NO. 66X SODIUM SALICYLATE, SODIUM IODIDE 15½ GRAINS EACH, AMPOULE NO. 66 SODIUM SALICYLATE, SODIUM IODIDE AND COLCHICINE, AND AMPOULE NO. 50 IRON AND ARSENIC (IRON CACODYLATE) 1 GRAIN NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that these are included in the list of ampoules for intravenous use marketed by the Lakeside Laboratories, Inc., Milwaukee. In 1921, in reporting on "Some of Loeser's Intravenous Solutions," the Council stated the objections to the intravenous administration of sodium salicylate and sodium iodide and of mixtures of drugs in fixed proportions. Since this time no evidence in favor of the routine intravenous administration of sodium salicylate or of sodium iodide has been brought forward, and the objections to the fixed proportion mixtures applies to the mixtures listed in this report. Ampoule No. 50 Iron and Arsenic (Iron Cacodylate) is unacceptable because the name is nondescriptive; because recommendations for the routine intravenous use of iron are not warranted, and because iron cacodylate presents an irrational and useless method of administration of iron and arsenic. The Council declared Ampoule No. 61 Sodium Salicylate 15½ Grains, Ampoule No. 59 Sodium Iodide 15½ Grains, Ampoule No. 66X Sodium Salicylate, Sodium Iodide 15½ Grains each, Ampoule No. 66 Sodium Salicylate, Sodium Iodide and Colchicine, and Ampoule No. 50 Iron and Arsenic (Iron Cacodylate) 1 Grain unacceptable for New and Nonofficial Remedies because recommendations for the routine intravenous administration of sodium salicylate and sodium iodide are not warranted and because the administration of sodium salicylate and sodium iodide, of sodium salicylate, sodium iodide and colchicine in fixed proportion and of iron and arsenic in the form of ferric cacodylate whether intravenously or otherwise is irrational.—(*Jour. A. M. A.*, January 4, 1930, p. 31).

EXCRETION OF BARBITAL.—Sir Maurice Craig holds that barbit preparations may be taken for years without producing deleterious effects. This view has received some experimental verification. On the other hand it has been held that in certain conditions—Manic-depressive insanity, constitutional psychopathic inferiority and psychoneuroses—its use may lead to habit formation and that to such patients these drugs should never be administered.—(*Jour. A. M. A.*, January 4, 1930, p. 35).

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the Food,

Drugs and Insecticide Administration of the U. S. Dept. of Agriculture which enforces the Federal Food and Drugs Act: Yumco Tablets (The Yum Products Corporation), containing sodium salicylate, acetphenetidin (phenacetin), baking soda, phenolphthalein, a trace of alkaloids and a laxative plant drug extractive. Kelp-O-Lite (Pacific Kelp Products Company, Inc.), consisting essentially of aluminum sulphate and water, with traces of calcium, iron, potassium and sodium compounds, benzoic acid and chlorides. Dakol Nasal Cream (New Haven Laboratories, Inc.), consisting essentially of petrolatum, with one-fourth of one percent of chloramine-T, volatile oils including menthol and a small amount of saponifiable fat. Sun and Moon Sacred Ointment and Sacred Herb Oil (A. W. Lowrie, Inc.), consisting essentially of a petrolatum and fatty acid base, with oils of sassafras, spearmint and wintergreen, while the herb oil consisted essentially of olive oil with oils of sassafras, spearmint and wintergreen. Flumonia (Fuming) Salve (VanVleet-Mansfield Drug Company), consisting of a petroleum jelly containing small amounts of menthol, camphor and oil of eucalyptus. Menth-Squillo (Mansfield Drug Company), consisting essentially of acetic acid, spirits of niter, menthol, a trace of red pepper, sugar, alcohol (6.8 percent) and water. Chek-a-Cold Tablets (The Continental Drug Corporation), consisting essentially of acetanilid, red pepper and aloes. U-Rub-It (U-Rub-It Chemical Company), consisting essentially of petrolatum and beeswax, with oils of eucalyptus, peppermint and sassafras, with menthol, oil of wintergreen and capsicum.—(*Jour. A. M. A.*, January 4, 1930, p. 50).

VIOSTEROL VERSUS COD LIVER OIL.—Cod liver oil and viosterol solutions are by no means to be regarded as therapeutically equivalent. Cod liver oil cannot be replaced by the newer irradiated products except so far as the antirachitic factor vitamin D is concerned. Cod liver oil is also a carrier of the indispensable vitamin A. Furthermore, cod liver oil contains digestible and assimilable fats.—(*Jour. A. M. A.*, January 4, 1930, p. 53).

RESUSCITATIONS AND INTRACARDIAC INJECTIONS.—The power to revive the dead is one that the physician is often, but vainly, expected to exhibit. The alleged miracles of such revivals by injecting epinephrine into the heart are always widely reported in the newspapers. Physicians who have heard of these alleged resuscitations are tempted to employ the same means. If the death was real, no harm and no benefit results. Revival follows sometimes, perhaps not because of the treatment but in spite of it. In such cases there is indeed grave danger that serious injury may follow from the treatment that the patient has received. The evidence seems conclusive that, if the patient revives after such an intracardiac injection, he would have revived without it. Intracardiac injection is not a justifiable measure for resuscitation.—(*Jour. A. M. A.*, January 11, 1930, p. 107).

PANCRETONE, ANOTHER NOSTRUM FOR DIABETES.—The Wabash Chemical Co. of Chicago exploits an alleged cure for diabetes called Pancretone. It also has as a sideline a number of other nostrums, such as Digestoids, Laxalets, Intesoids, Pilene, Virillo, Asthmatol, and Myrol. Pancretone is advertised on the free-trial treatment plan, common to diabetes cure quackery. According to the advertising for Pancretone, the diabetic who will take the preparation "requires no rigid diet regulation." He is told, however, that he must "not use potatoes, white bread, sugar, candy, pie and cake, macaroni, rice, spaghetti and beans, dates, figs, bananas, preserves and jellies." The A. M. A. Chemical Laboratory examined a package of Pancretone consisting of tablets, and also a specimen of Laxalets and of Digestoids. From its examination, the Laboratory concluded that "Pancretone" is essentially a "digestive tablet" containing an amylolytic enzyme, to which has been added considerable calcium carbonate and corn starch; that Laxalets are essentially a laxative combination, suggestive of aloin, belladonna, cascara and strychnine; and that Digestoids are essentially a digestive combination suggestive of charcoal, baking soda, saccharated pepsin, pancreatin and aromatics. It is obvious from the report of the analysis that any beneficial

results that may follow the Pancretone treatment" will be due to the rigid diet restrictions that are part of it. Any preparation that is so advertised as to induce diabetics to treat themselves without the advice of a physician is a menace. Pancretone belongs to this class!—(*Jour. A. M. A.*, January 11, 1930, p. 124).

ERGOTAMINE TARTRATE.—The value of ergotamine tartrate in the treatment of migraine has not as yet been fully established. Recently good results have been reported from its use. A knowledge of the action of the drug makes it easy to understand why the drug may help in some cases and more frequently fail to relieve. The drug is unfit for prolonged use because it may lead to gangrene and other symptoms of ergotism. According to New and Nonofficial Remedies, ergotamine tartrate is marketed under the name "Gynergen" by the Sandoz Chemical Works.—(*Jour. A. M. A.*, January 11, 1930, p. 126).

PHYLLAMIN.—According to the advertising of Menley & James, Ltd., Phyllamin is "A Delectable Concentrated Tonic Nutrient" and "Presents Fresh Summer Spinach Juice Cold Expressed." The preparation is claimed to contain "Chlorophyll and all the known five Vitamin Factors" and to represent "all the mineral salts of vegetables and fruits conserved in pure honey." As is the case with many proprietary preparations claimed to owe their value to the presence of vitamins, the advertising makes extreme claims for therapeutic qualities but contains nothing to indicate that determination of the vitamin potency actually have been made. The preparation has not been accepted for New and Nonofficial Remedies.—(*Jour. A. M. A.*, January 11, 1930, p. 127).

"COMMON COLD" VACCINES.—The nearest approach to a final proof that infections of the upper respiratory tract usually grouped under the term "common cold" are due to an unknown filtrable virus has been made by Dochez and his co-workers. This unknown filter passer is not contained in any currently exploited "common cold vaccine."—(*Jour. A. M. A.*, January 18, 1930, p. 189).

ANOTHER MAURICE LUNDIN FRAUD.—Maurice Lundin has been conducting a concern that he called the Bono Drug Co. (and also Bono Co.) in New York City and Jersey City, New Jersey. The postal authorities have just debarred the Bono Drug Co. and the Bono Co. from the use of the mails because of the fraudulence of the business. Under another name Lundin, according to the federal authorities, is also engaged in marketing a small pneumatic ring called the "Potentator" supposed to be worn around the scrotum and penis for the cure of impotence. The sale of this device by one Julius Saur, with whom Lundin was associated formerly, was the basis of a fraud order in 1928. Under still another name Lundin sells through the mails a device called the "Saddle," also sold as a cure for impotence; this was recently held obscene by the postal authorities. A few years ago a fraud order was issued against the Strong Chemical Co. (another Lundin enterprise), which was selling a glass vacuum pump called the "Emperor Male Developer." Lundin's Bono Drug Co. sold three products: (1) "French Pep Tablets," said to be a cure for impotence, sexual debility, inflammation and enlargement of the prostate, "kidney trouble," "bladder trouble," etc.; (2) "French Pomade," which was a supplementary treatment to be used with the French Pep Tablets, and (3) "Bonol Balsam," which was supposed to grow hair on bald heads!—(*Jour. A. M. A.*, January 18, 1930, p. 205).

MOTHER NATURE'S MARVELOUS POWDER.—Mother Nature's Marvelous Powder, sometimes called Mother Nature's Marvelous Remedy and sometimes P. G. Powder, is put on the market by Nature's Mineral Remedy Co., which does business from a post office box in Durango, Colorado. Nature's Mineral Remedy Co. seems to be a trade name used by one W. C. Picking. More recently it appears that Picking has organized another concern known as the Colorado Natural Remedy Association of Denver. This also sells powdered rock (under the name "Kolorok") and it, too, is described as "Mother Nature's Powder." From the advertising it appears that the "Marvelous Powder" is good for whatever ails you. From the analysis made in the A. M. A. Chemical Laboratory it

appears that this product consists essentially of approximately eighty-eight percent of calcium sulphate (gypsum) and ten percent of calcium carbonate (chalk), containing probably a trace of calcium oxide (lime).—(*Jour. A. M. A.*, January 18, 1930, p. 205).

ARMSTRONG'S OXYCATALYST.—No scientific evidence worthy of the name appeared to sustain the claims made for the Oxycatalyst, while there is increasing evidence that the exploitation of the product is much more concerned with economics than medicine. Two original ampules of Armstrong's Oxycatalyst were examined in the A. M. A. Chemical Laboratory. The contents of the ampules were found not to hasten the discharge of a charged electroscope, indicating that the product was not radioactive. The Laboratory concluded that the specimens were nonradioactive preparations probably containing sodium chlorate, ferric chloride and sodium phosphate.—(*Jour. A. M. A.*, January 18, 1930, p. 206).

MULTIPLE NEBULIZER-IMPROVED ACCEPTABLE.—The Council on Physical Therapy reports that this apparatus has been found acceptable for inclusion in its list of accepted physical therapy apparatus. "The Multiple Nebulizer-Improved" (American Technical Laboratories, Glendale, Calif.) is stated to be an apparatus that atomizes or nebulizes oils or other liquids. It is so constructed that any such medicament can be administered alone or in combination with other medicaments without interruption of treatment.—(*Jour. A. M. A.*, January 25, 1930, p. 265).

LUKUTATE.—This is another rejuvenating nostrum from the orient via Germany. It seems to have run a somewhat hectic course in Germany. In due time, its value was appraised correctly, and the Germans appear to have relegated it to the limbo of futile fakes. Today, the Lukutate Corporation of America is trying to convince the people of these United States that in Lukutate we have a rejuvenating substance of marvelous potentialities, but no definite information in regard to its composition is offered. It is stated that "The history of Lukutate is one of ancient lore and modern science, oriental jungle and European laboratory" and that "The basic ingredients are certain Indian fruits. * * *" It is claimed that for hundreds of years these extraordinary fruits have been known to the natives and have been sought eagerly by tribes and even animals of all sorts. An aphrodisiac slant pervades the advertising. An imposing array of German and Austrian testimonials forms part of the "come on" advertising of Lukutate. However, articles in German medical and pharmaceutical journals indicate that physicians in that country are far from being as enthusiastic over Lukutate as the American public is led to believe. The results of official investigation of Lukutate in Austria were to the effect that the main ingredients were frangula (buckthorn) and cascara sagrada and that, therefore, the Lukutate products were to be regarded as medicinal preparations and their sale seems to have been prohibited in Austria. In the United States testimonials for Lukutate seem, at present, to be much less imposing. The A. M. A. Chemical Laboratory examined specimens of Lukutate Tincture purchased from the Lukutate Corporation and found it to be essentially an aqueous-alcoholic solution of plant extractives, one of which is indicative of an emodin-bearing drug, such as cascara, senna, or buckthorn, and containing a small amount of fruit sugars (fructose).—(*Jour. A. M. A.*, January 25, 1930, p. 281).

MEDICAL PUBLICITY BUREAU—A CORRECTION.—An article on the Medical Publicity Bureau was published in *The Journal of the A. M. A.*, December 7, 1929. The information given relative to the personnel of the Bureau was based on two reports—one furnished by the National Better Business Bureau and the other by the Department of Health of the City of New York. In the course of the article these statements appeared: "National Better Business Bureau reported * * * that Dr. James Macbeth and Dr. William J. Robinson were the principals * * *" The report further said that "Dr. William J. Robinson of the *Critic and Guide* was the principal stockholder * * *" Dr. Robinson has notified *The*

Journal of the A. M. A. that "at no time has he been in any way whatever, directly or indirectly, closely or remotely, actively or passively, connected with the Medical Publicity Bureau" and that "at no time has he held any stock in said Medical Publicity Bureau."—(*Jour. A. M. A.*, January 25, 1930, p. 282).

EFFECTS OF CINCHOPHEN.—Purpuric, urticarial, or scarlatiniform eruptions have been reported by many observers following the administration of cinchophen. They may occur with or without edema. Gastro-intestinal disturbances, from epigastric discomfort to acid eructations and heartburn, are the commonest expression of intolerance to cinchophen. These may be avoided by the giving of an abundance of water with the drug, and one Gm. of sodium bicarbonate, though the latter should be given separately and not mixed with the drug. By using neo-cinchophen, one may avoid usually the symptoms of gastric irritation. Sometimes cardiovascular disturbances have been noted. By far the most serious results of cinchophen intoxication result from injury to the liver, which may even go on to a fatal acute yellow atrophy.—(*Jour. A. M. A.*, January 25, 1930, p. 283).

COD LIVER OIL, VIOSTEROL OR SUNLIGHT FOR RICKETS.—Cod liver oil, viosterol and ultraviolet rays are accepted generally as specific agents in the prevention and cure of active rickets in infants. Their relative merits are still under investigation. Cod liver oil contains the valuable vitamin A in addition to vitamin D. Viosterol is of advantage because of the ease of administration and its concentration. Ultraviolet rays are undoubtedly a valuable therapeutic agent when under controlled supervision. Their effect on general nutrition and resistance as well as on the calcium retention is good. Their use to the exclusion of vitamin D or viosterol seems unwise. A combination seems most desirable when sunshine is not available.—(*Jour. A. M. A.*, January 25, 1930, p. 283).

FILTRABLE ELEMENTS OF TUBERCULOSIS VIRUS (TUBERCULOUS ULTRAVIRUS)

Numerous researches in the last few years have confirmed the hypothesis put forward by Fontes in 1910 regarding the filtrability of the tuberculosis virus, and have revealed the existence in cultures of the tubercle bacillus, as well as in tuberculous lesions, of certain elements which can pass through porous porcelain filters and produce in guinea-pigs inoculated with tuberculous filtrates never show (even after a survival of from six to eight months) an inoculation chancre with its satellite caseous adenitis, or the nodular visceral lesions which are generally obtained through the inoculation of tuberculous products. A. Calmette, J. Valtis and A. Saenz, Paris (*Journal A. M. A.*, June 22, 1929), assert that on the other hand, the glands in the vicinity of the point of inoculation become slightly swollen from the tenth to the fifteenth day and subsequently become normal again. Autopsies of animals having died from an intercurrent disease, or as the result of an emaciation syndrome, do not show any caseous glandular lesion. The entire lymphatic system, and especially the tracheobronchial glands, are slightly swollen. These glands are hard and sometimes contain liquid pus composed of polymorphonuclear leukocytes. It is possible to detect typical acid-fast bacilli on smears made from these glands after exhaustive examinations which require sometimes five or six hours. These bacilli are either isolated or, more frequently, grouped in masses containing numerous elements in the middle of an amorphous mass which can be colored with methylene blue (methylthionine chloride-U. S. P.). They are more easily found during the first two weeks and first two months after inoculation. After this delay they are likely to disappear. Sometimes the infection produced by the inoculation of tuberculous filtrates is manifested solely by the temporary appearance of tuberculinic allergy. In such cases a temporary infection is produced which ceases with the destruction in the organism of the filtrable virus, this being the so-called labile virus of Arloing and Dufourt. Finally, in exceptional cases, after

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A M E R I C A N O P T I C A L C O M P A N Y

(Continued from page 204)

the inoculation of tuberculous filtrates, one may find discrete nodular lesions limited to a single organ (lung or spleen), but here again there is no trace of any inoculation chancre or of the customary satellite adenitis. These atypical forms of tuberculous infection in guinea-pigs, resulting from inoculation of tuberculous filtrates are due to modifications in the virulence of acid-fast germs development from filtrable elements of the tubercle bacillus. Proof of the attenuation in virulence of acid-fast elements developing from tuberculous ultravirus is supplied by the fact that, when a healthy guinea-pig is inoculated with lesions containing tubercle bacilli (sometimes in great numbers) produced in another animal following inoculation with tuberculous filtrates, a typical tuberculosis is not observed but instead lesions analogous to those produced by the filtrable elements of the tubercle bacillus. It is only after a certain number of transfers that in most cases the virulence of these germs is finally increased, producing then in guinea-pigs a typical form of experimental tuberculosis. In their experiments Calmette and his co-workers have always used new Chamberland number 2 filter bougies, which were duly controlled by the addition of another organism (twenty-four hour culture of fowl cholera). They never exceeded a pressure of 20 cm., and filtration was always effected within from eight to ten minutes. It is necessary to make allowance for a possible cause of error when the lymph glands of normal guinea-pigs previously injected with tuberculin are examined, for Saenz has shown that in the centrifugated sediment of old tuberculin diluted 1 : 10 it is possible to find numerous cadavers of tubercle bacilli, the shape and tinctorial affinities of which are unimpaired, and that they can be discovered easily in the lymph glands of guinea-pigs inoculated subcutaneously with this diluted tuberculin.

IMMUNIZATION AGAINST DIPHTHERIA

GEORGE F. DICK and GLADYS HENRY DICK, Chicago (*Journal of the A. M. A.*, June 8, 1929), found that diphtheria toxoid employed in the three doses recommended by Ramon immunized 94 percent of 100 suscep-

tible persons to the point of a negative Schick test. The five doses of toxin-antitoxin mixtures employed immunized 82 percent of 100 persons to a negative Schick test. The results with both preparations were good; especially since the majority of persons in the series were adults, who are more difficult to immunize than children, and since in most of those who showed positive Schick tests after immunization, the size and intensity of the reaction had been reduced, indicating that they had acquired considerable, if incomplete, immunity. The fact that the series given toxoid included children while those given toxin-antitoxin included no one under 17 years of age does not account for the difference in results. Exclusive of children, 93.3 percent were completely immunized in the series given toxoid. The reaction that occurred in the young woman demonstrated to be sensitized to protein contained in veal broth appears to support Kolmer's idea that proteins in the medium employed for producing toxin may be responsible for part of the reactions that occur during the course of immunization. Since diphtheria toxoid is usually a more concentrated solution than the toxin dilutions used for toxin-antitoxin mixtures and since persons susceptible to diphtheria may be sensitized to proteins contained in the broth, it is advisable to keep the foreign protein content as low as possible in broth used for producing toxoid. Because it does not contain any foreign serum in the form of antitoxin, the toxoid does not sensitize to horse or other serum. They conclude that diphtheria toxoid as prepared by Ramon and given in the three doses recommended by him is a better immunizing agent than 0.1 L + diphtheria toxin-antitoxin mixtures, even when five doses of the latter are given. Diphtheria toxoid may safely be employed in immunizing adults. An extra skin test to detect sensitization to the bacterial proteins in diphtheria toxoid is not necessary. If there is a marked "pseudoreaction" in the Schick test or a history of diphtheria, it is advisable to give preliminary doses of from 0.1 to 0.25 cc. of toxoid. Care should be taken that the broth employed in producing the toxoid does not contain an excessive amount of protein.



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ORIGINAL ARTICLES

BEHAVIOR DISORDERS AFTER ENCEPHALITIS*

EARL D. BOND, M.D.

PHILADELPHIA, PENNSYLVANIA

The leading article in the *Journal of the American Medical Association* for Sept. 21, 1929,¹ expresses very well the proper attitude of a specialty to general medicine. Doctor Mulherin says: "It should be recognized fully that general practitioners treat more babies than do pediatricians; therefore some method should be devised by means of which the general practitioners could be informed on current pediatric topics." It is also certainly true that general practitioners treat more mental and nervous patients than do psychiatrists. What kind of disease is not complicated by nervousness? The best topic to discuss at such a meeting as this is one that begins in psychiatry and ends in the field of general medicine.

The central experiment which I have to report is a psychiatric study in a mental hospital of forty-eight children whose behavior was badly affected by epidemic encephalitis. Surrounding this nuclear study is a consideration of other agents which may produce small hemorrhages and other minute brain lesions and be followed by similar conduct disorders. Important here are the toxins of all the common infectious diseases of childhood and the concussions and "mild" brain lacerations after trauma (especially after automobile accidents). And on the periphery of the field is a consideration of bad behavior in general, and the obligation of physicians to consider carefully that part of it at least which is partly the results of physical lesions. In a parallel experiment the hospital has studied fourteen children in whom the organic lesion was absent or unknown.

In the sixty-two children, none showed evidence of progressive neurological disease (the Parkinsonian syndrome) and only six were found to be feeble-minded. All were under twelve. We were dealing with bright children who were head-

ed for the jail. There is every reason to suppose that there are many similar children in Indiana; a group has been described in Chicago.

Let me give you an example of a case history of a girl received by us before we recognized a method of dealing with these children.

Blanche was a normal enough girl to the age of eight: She had an I. Q. of 120. Her attack of encephalitis came on suddenly with temporary paralysis, crossing of the eyes and double vision, and sleepiness. A change of behavior manifested itself in tantrums, jealousy, over-activity, over-affectionateness, obscenities and sexual misdemeanors. At a Child Guidance Clinic no treatment was available. At this hospital, among adults, she was wild, stole, broke the water coolers, upset trays and dishes, and lied out of everything. A characteristic description of five minutes of her behavior follows: "In the continuous baths she pinched and pushed a ward-maid and laughed to see her fall; she soaked a nurse who came to the rescue; then she jumped out of the tub and kicked the ward-maid viciously as the latter leaned over; then she got back in the tub and assumed an expression of angelic innocence."

Four weeks at the hospital did her no good. At home she was put in a cage. She was sent to a reformatory and to a state mental hospital, where she now remains, unimproved.

Following our experience with this girl and others, we decided to take in a group of children. It is something of a help to find that the stories of the children before being admitted to the hospital fall into patterns. We attempt to give these as composites, with individual variations or striking examples in parentheses.

About twenty-one boys had records roughly as follows: They were good, *obedient*, well-behaved, bright children, either of the lively or shy sorts, up to a certain age, which varied from three and a half to eleven years (usually about six years).

Then, "all of a sudden," often after an attack called the "flu," or after a head injury, appeared such symptoms as crossing of the eyes, or seeing double, paralysis of legs, headache and nausea, outpouring of saliva, disturbed breathing or wetting of the bed.

*Presented before the Indiana State Medical Association at the Evansville session, September, 1929.

1. Sept. 21, 1929; vol. 93, No. 12, p. 889.

In almost all cases appeared a disturbance of the normal sleep rhythm. Some would fall asleep in the day time, standing up, in school or on the street; one would fall asleep even when a plate of ice cream was set before him, and sleepiness in a boy can go no farther than that. The same boys wanted to turn night into day; they sang and whistled or roamed the streets, camped in barrels, searched through their houses. The first physical insult which they received was sometimes followed by a second—a collision with a truck, a fall or a beating by an older boy. Once an automobile accident to the head came first, and encephalitis second.

Following the first physical symptoms at once, or after a lapse of years, came changes in behavior. The boys became disobedient, unmanageable, restless; they got into many fights; they stole rides on trains and automobiles. One little fellow of seven curled himself up in the spare tires of cars apparently bound for a long run. One amused himself by letting the air out of the tires of parked cars. All lost their fears of punishment and of consequences; but, curiously, they often took on other, most unusual and foolish fears. They lied and stole and often were caught. They stole canaries, kiddy cars, money, watches, toys, rifles, the Book of Knowledge, spectacles, flower pots, and Victrola records. They characteristically gave away what they stole. And they became mawkishly over-affectionate; anxious to paw strangers; anxious for notice. Other boys simply went from bad to worse after encephalitis.

In seven instances the attack of brain disease came so far back in infancy that it is hard for us to tell whether before it they were wicked infants or not—or even to judge whether they adjusted well enough socially. After the attacks it is the same story of disobedience, inability to get on with other children, truancy, lying and stealing. One of these boys started a forest fire; a pregnant woman came to fight it to protect her home and died from the exertion.

Because of the allowances we made before admission to the hospital for behavior which might lower the rating of tests for intelligence, six boys have been admitted whose intelligences were too low (64, 66, 69, 77, 76, 77). These children had shown inability to learn and were disobedient from birth. In them, encephalitis, and in one case possibly malnutrition also, had made matters worse by bringing a motor restlessness and irritability. Their bad behavior, however, lacked the initiative and interest which marked the exploits of the brighter boys.

Seven of the girls were good, "lovely" babies, who developed normally into likeable, generous, kind-hearted, attentive and obedient children. But at the ages of three, three, four, five, six, eight and ten came injury to the brain, followed by bad conduct which parallels that of the boys.

These children were put into quarters separated

from those occupied by adults at the hospital and organized as a school under experienced and full-time nurses, teachers, and occupational therapists. They received a great deal of expensive individual attention. They were kept busy every moment of the day. Although their histories made us expect trouble at night, we found none; the children have slept well. At all times a long distance plan was in evidence, and a scientific attitude.

The results of over four years' treatment of the boys, and over one year's treatment of the girls, must be considered from two viewpoints. In hospital classes these children have done well; of all of the sixty-two, only two have failed to show improvement. Taken singly, these children are unmanageable; in groups up to fifteen in number they improve. "It is easier to handle a dozen than to handle one." And during the hospital residence any number of normal children, mothers and sisters and playmates have been protected from an evil influence. Of the two children who did not respond in any way, one was feeble-minded and the other showed behavior epileptoid in character.

Most people will be interested in the results measured not at the time of discharge from the hospital but after a return to ordinary life. Here we can make no generalization, as we could with regard to hospital residence, for there was almost every imaginable kind of outcome.

In the first place we still have good results. John H., mentioned above as gaining so much in class, has done just as well at home for three years, and as he is now seventeen, it seems that he is settled in good habits. (I. Q., 101, 91, 84).

William, admitted at the age of seven with an I. Q. of 92, began class treatment only two months after his brain infection. He had become "wicked," excited, bossy, and had developed a curious interest in water. He showed bad temper and "saw things." After four months in the class he was discharged well, and after three years at home he is obedient, playing well with other children and "doing wonderful at school."

Several boys began to slide backward as soon as they got home, although in some cases the homes seemed to be above the average. And in several other cases the results are doubtful: sometimes the boys are not doing well, but are doing as well as their parents and the other boys in the neighborhood.

A summary of long distance outcomes of the forty-eight central cases shows seven good, seven doubtful, six bad, while six turned out to be feeble-minded and twenty-two are still in the hospital. Naturally the feeble-minded do not get on in the community, but they could continue to improve in a good school adapted to their needs. Of the twenty-two still in class, many are doing exceptionally well.

Suggestions: A first suggestion is that better care of convalescence in children is needed. Time

after time conduct disorder starts in the irritable weakness which characterizes beginning recovery. And doctors and nurses are prone to lose interest when the fever goes down, forgetting that convalescence needs twice the skillful professional handling that the disease calls for. But what is the use of bringing the child through the disease if immediately he is to acquire habits which will ruin his life (will "spoil him")? Taken early, there is considerable chance of redeveloping the child's good habits. When the child is still confined with any of the symptoms that mean early encephalitis—even when the child is delirious with fever—the doctor ought to prepare the parents. He should tell them, "I have to fight first for this child's physical life and then you and I must fight for his chance to live a normal mental life; you must be ready to train this nine- or ten-year-old child in good habits as if he were a baby again; you must not expect him at first to show the judgment of a seven-year-old; you must expect him to be irritable; you must keep other children away from him and provide something for him to do; you must not sympathize with him too much or spoil him because he is sick and, above all, you must never let him get you angry or excited."

There is no doubt that this order on the family is a large one, but if behavior disorder in the child gets a start the actual existence of the family is at stake as more than one has been broken up by the strain of trying to adapt itself to a changed child. The object of all this schedule, of course, is to avoid the bad habits that tend to come in convalescence from any disease, but especially in convalescence from a curious illness which has thrown the nervous system out of kilter. There is something about behavior following encephalitis that makes people angry and it is anger on the part of the family that often starts up more bad behavior in the child. If the parents can be made to understand that punishment, even to relieve their own high state of nervous tension, is of no use, it is half the battle and the other half is getting them to see that they must insist on a strict regime, sticking to a sensible course, no matter what the patient does. If there is someone in the family who can do for the patient about what a special nurse would do a great point is gained. The record of one or two children under family care has given me considerable faith in it. In one of these where a girl of six was attacked and left without practically any habits at all there happened to be an aunt who had a farm at her disposal and who took the child and gave her unremitting attention. With much intelligence and considerable money at the family's disposal the child was brought back to what was considered a normal at the age of eleven. In another case a girl of nine was described before encephalitis as amiable, docile, generous and a constant delight to her family. After her illness she threw her food and dishes to the floor, tore the paper off

the walls, smashed the furniture and lighted fires on it. She spilled and threw water everywhere; in one instance she got the mop and partly wiped up the water then hit her mother with the mop. She got in a different bed every few minutes all night, ate her hair, and tormented other children.

For three years the parents gave up most of their duties and social pleasures and devoted themselves to her. Other children were kept away. The mother observed that fatigue and hunger increased the attack of deep breathing and by increasing and watching her diet she improved a great deal. The parents soon learned that punishment had no effect but they did insist upon regular habits. After three years of this there seems to be a recovery. It was a great help to her, of course, that there were no other children in the family. While, however, the child is at present well the parents have almost broken down under the nervous strain.

Unfortunately usually the doctor has to deal with a father who has to work all day and a mother who has the care of a lot of other children.

In the latter case if the physician is faced with the beginning changes of behavior there seems nothing left to do but to try to place the child away from its home. It is just possible that another home without children or headed by people with the right sort of experience may be helpful. In the long run I do not see any other possible help for these children unless a children's department can be opened in one of the state hospitals. I can think of nothing that the members of the state medical society can do than to lend their influence to the establishing of juvenile groups in the local state hospitals or in a central one. If such hospital groups are formed the doctor will have little difficulty in persuading parents to send children there and if the parents are not at first willing all the doctor has to do is to wait until the child drives them so distracted that they will consent to anything.

Another suggestion is the interest and possible advantages of more comprehensive consideration of the so-called "minor brain injuries" and behavior. Physicians should read about the "punch-drunkenness" described by Maitland,¹ the cerebral birth traumata described by Crothers,² and the extension of theories in this direction by Rosett.³ The last-named sees "evidence of intra-ocular and sub-arachnoid hemorrhages" pointing to "a crippling of about one-third of human beings born," which "must in years to come be manifested by a large defect of behavior." Our own histories point plainly enough to the dangers of slight brain involvement in any of the infections of childhood, in malnutritions, and in (automobile) accidents, and to the possibility that any of these noxious agents may light up an old quiescent encephalitis.

We wonder how many psychopaths are not born

but made, not by a brain lesion *per se* but by a physical injury plus the bad management of it.

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THE DISTRIBUTION OF DIPHTHERIA IN INDIANA*

THURMAN B. RICE, M.D.

INDIANAPOLIS

Inasmuch as diphtheria is now entirely subject to scientific control, the occurrence of more than an occasional death from this cause in a given community indicates a lack of interest which calls for attention. The purpose of this paper is to indicate to the profession the need for concentration upon certain areas to the end that this disease may in large measure be eradicated. It is safe to say that without a map study of this sort there is not a physician in the state who would be able to indicate the areas where diphtheria has been, or is, more or less prevalent.

As might be expected, and as is shown by the following study, diphtheria is different from tuberculosis and typhoid fever in that it does not show a marked predilection for a given geographical area. There are, to be sure, certain sections which have rather constantly had more of it, but there would seem to be no reason why a given community could not as easily eradicate the disease as could another community unless there were wide cultural and economic differences. The county that has had a disastrous diphtheria epidemic will often show no deaths the following year for the reason that attention has been given to the matter and the proper precautions taken. On the other hand, a community which has had none of the disease for several years is very liable to become careless in the matter of prevention and immunization, and a highly susceptible generation of children is produced.

That diphtheria is one of the most common causes of death in small children is shown by the figures for the years 1921 (the highest rate in recent years) and 1929 (the lowest rate recorded for Indiana). In spite of the fact that diphtheria can be prevented entirely, it usually heads the list. The remaining three diseases present extremely difficult problems in prevention.

| Disease | Death Rate per 100,000 Population | |
|-------------------------|--------------------------------------|------|
| | 1921 | 1929 |
| <i>Diphtheria</i> | 23.9 | 4.8 |
| Whooping cough | 11.8 | 5.6 |
| Scarlet fever | 5.5 | 3.2 |
| Measles | 2.4 | 3.9 |

*This is the second in a series of papers endorsed by the Diphtheria Prevention Committee of the Indiana State Medical Association.

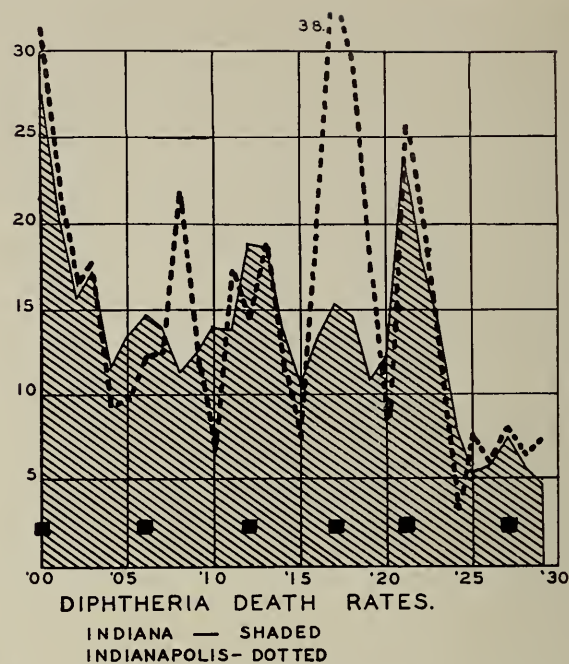


Fig. 1. Diphtheria Death Rates in Indiana and in Indianapolis.

Note that no real progress was made from 1902 to 1923 in spite of the fact that the disease was well understood. The square spots at the bottom of the graph indicate the peak years.

Diphtheria death rates are available for the state of Indiana since 1900. The graph representing these rates is one of much value and interest. (See Fig. 1.) In the first place it is to be noted that there was really no improvement in the rate between the years 1902 and 1923. Antitoxin was used in this state as early as 1895, but there was much opposition to it and the doses were very small. The "antitoxin period" cannot be said to have begun much, if any, before 1902. Beginning with this time the rate was considerably lower than in the "pre-antitoxin period." It will be agreed generally that the use of this most valuable serum is responsible for the lowered rate. Antitoxin could not, or at least did not, bring the average rate lower than about fourteen deaths per 100,000 population. Beginning with about the year 1923, active immunization by the use of toxin-antitoxin began to be practiced rather generally. It seems not unreasonable to suppose that much of the lowering of the rate since that date may be due to this program—a program which deserves to be much more intensively pushed.

An important fact in the interpretation of the data at hand is the realization of the fact that diphtheria, like many other diseases of an infectious nature, has a definite periodicity, making the graph "saw-tooth" in appearance. Maximum or "peak" years were observed in 1900, 1906, 1912, 1917, 1921, 1927, making an average of five or six years between the crests of the graph. On the basis of such experience we may expect another peak about the year 1932 or 1933. If this peak can be held to a low level the profession may be pardoned for being proud of the accomplishment.

The Indiana State Medical Association has set for itself the task of eradicating diphtheria. If this aim is attained it will be accomplished by means of a rational and scientific attack. Such a program calls for definite information—in what parts of the state the disease is most prevalent, in what age groups, in what race, in what season, etc. These relations are not entirely unknown by any means, but are in need of restatement with particular reference to Indiana. Furthermore, there are certain facts which were unexpected and probably significant.

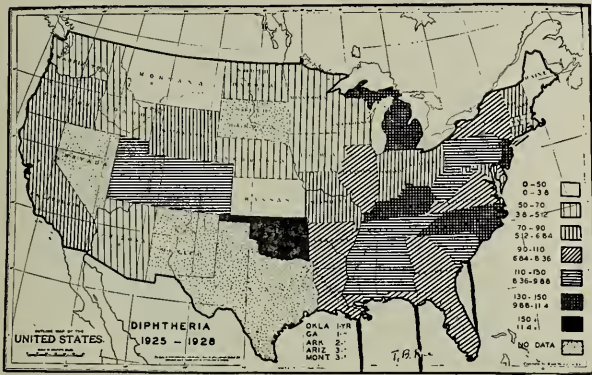


Fig. 2. Diphtheria Death Rates in the United States, 1925-1928. The rate for most of the states is the average of the four years indicated. Oklahoma is for but one year, which fact may explain its very high rate. In the main the states east of the Mississippi have a higher rate. It is not easy to understand why this should be true. Indiana compares well with the surrounding states. (Data furnished by Bureau of the Census.)

The map giving the rates for the United States is interesting, but not easy to explain. Why should the eastern portion have in a general way the higher rates? It might be supposed that the southern states have higher rates because of the negro population, but it will be shown that negroes have lower rates than the white race. Lack of cultural development hardly can be ascribed as the cause inasmuch as Michigan and New Jersey have high rates. Dampness has been said to predispose to diphtheria and might rather well fit the map were it not for the states of Utah, Colorado and Oklahoma. In the main, the map showing distribution in the United States, like the maps of Indiana, shows a patchy distribution. Very likely this effect would be less marked if the period of time were longer, thus reducing the error, but other periods show very much the same relations.

A word of explanation is necessary concerning the following maps of Indiana. If all were made on the same scale of shading it would be hard to compare maps for the various periods for the reason that the more recent ones would be much lighter, and significant relations would be masked. For this reason the maps are shaded on a relative rather than an absolute scale. Each county is shaded in relation to the average for the state for the same period. Counties with no deaths are made white; those with less than forty percent of the state rate are given the first shading as

indicated in the legend accompanying each map; those with forty-eighty percent of the state average next heavier, etc. Counties with about the average rate are marked by diagonal lines; those with more than 200 percent of the state rate are solid black. In each case the depth of shading roughly indicates the rate.

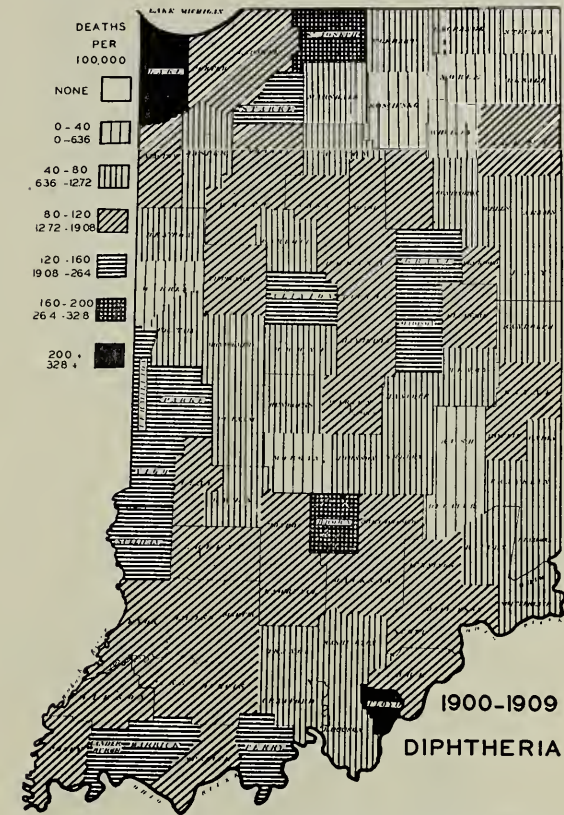


Fig. 3. Diphtheria Death Rates in Indiana, 1900-1909. In this and the following maps (except Fig. 10) the counties are shaded in relation to the state average for the same period as is explained in the text. The death rate from this disease seems to bear little relation to geography or any other factor that can be shown on a map. In this respect it is quite different from tuberculosis, typhoid, and certain other conditions.

If it were not for the succeeding maps, the first Indiana map (Fig. 3) apparently would have little meaning. When, however, these are taken into consideration it will be seen that approximately the same areas show somewhat higher rates, or lower as the case may be.

The second Indiana map (Fig. 4) shows a very definite focus in the southwestern quadrant. A smaller focus is seen in the counties of the northwestern corner. A focus which will bear watching is that about Madison and Grant counties.

The third Indiana map (Fig. 5) shows the same three foci except that they have shifted slightly. Interesting in the light of the succeeding maps is the increase in the rate for Switzerland county.

The map for the period 1925-1927 (Fig. 6) shows the focus in the southwestern counties considerably changed. The focus about Lake county seems to have spread to the second county away. The north central focus shows only one dark county. In the southeast there has been a definite development.

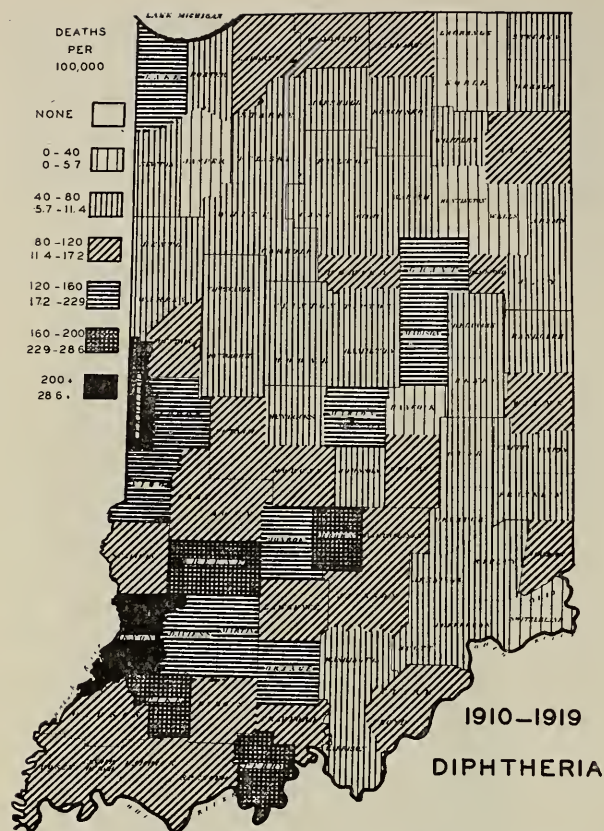


Fig. 4. Diphtheria Death Rates in Indiana, 1910-1919. It will be noted that there is a definitely higher rate in most of the counties in the southwestern quadrant of the state. The focus represented by Grant and Madison Counties will bear watching in subsequent maps. Lake County should be compared with maps of the period preceding and following.

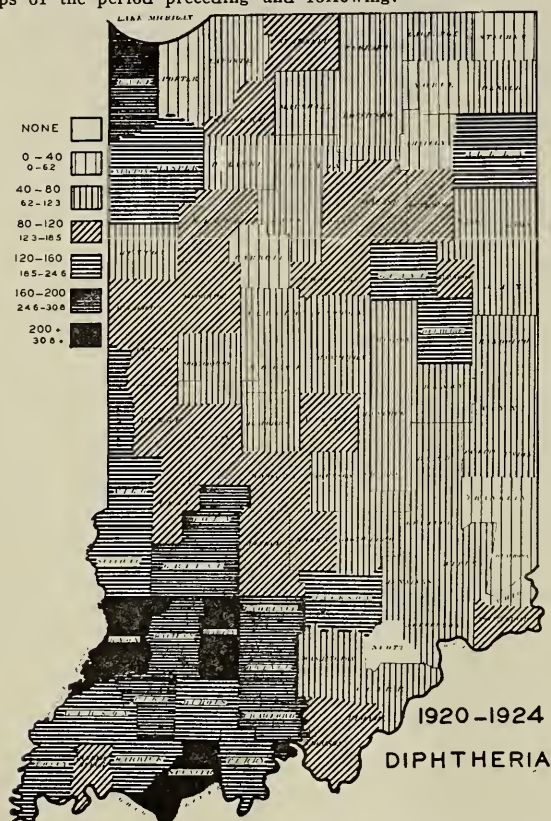


Fig. 5. Diphtheria Death Rates in Indiana, 1920-1924. In most respects this map is like the preceding in that the southwest quadrant is most involved. Lake county is high, and there still remains a focus about Grant county.

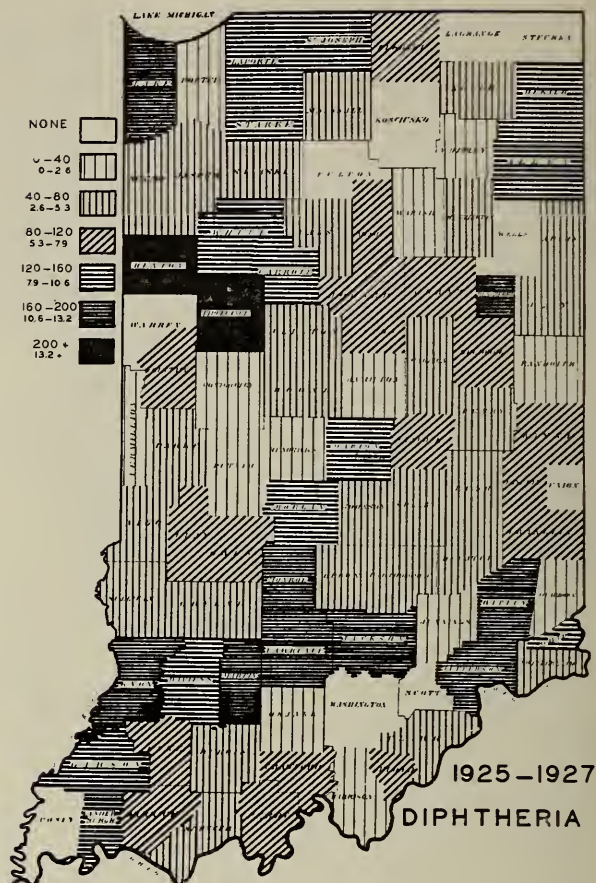


Fig. 6. Diphtheria Death Rates in Indiana, 1925-1927.

So short a period as three years, and especially when the death rate is low, causes a considerable limit of error. The map is of interest as a record of the rates actually recorded, but should not be made the basis of important general conclusions. Much the same foci are seen. Comparison with preceding maps will show that the Lake county focus has spread apparently to the south and the east.

The map for the year 1928 (Fig. 7) being for a short period has a high error beyond doubt, but it was thought very important to emphasize the rates of the very recent years, making it possible to use the maps in actual prevention work. Persons interested in diphtheria prevention may be able to use data for a single year which would be masked by a five-year period.

The year 1929 (Fig. 8) shows essentially the same foci as before. The extreme southeastern counties seem to have controlled their epidemics. In studying the two last maps (Figs. 7 and 8) it should be remembered that a single death in a small county, the state average being very low, will give that county a dark shading.

Fig. 9 is given to overcome the effects of a high error due to a short period of time and to make a map that can be compared to the first three. It will be seen that the distribution of deaths from diphtheria is essentially the same as in previous years. It would seem that the Diphtheria Prevention Committee under whose indorsement this article is written, should give particular attention to the counties in the southwestern and south central part of the state. A number of counties in other

portions of the state have a definite problem also.

Having called attention to the fact that certain counties have had high rates rather consistently, it is no more than deserved recognition to mention that other counties have had good records for the most part. Posey county has commonly had a considerably lower rate than the adjoining counties. Until 1929 Scott county had not had a death since 1920. Except for the year 1928 Rush county has had a particularly good record. The counties of the extreme northeast corner have had consistently low rates since 1900. Fulton county has had low rates in each map and has had no deaths since 1924. Interesting is the fact that Monroe county was black in 1928 and white in 1929, while the reverse relation holds for Scott county. Generalization on data for one year should not be made, but it is interesting and instructive to know that a given county can correct very quickly its position, or can spoil very easily a good record.

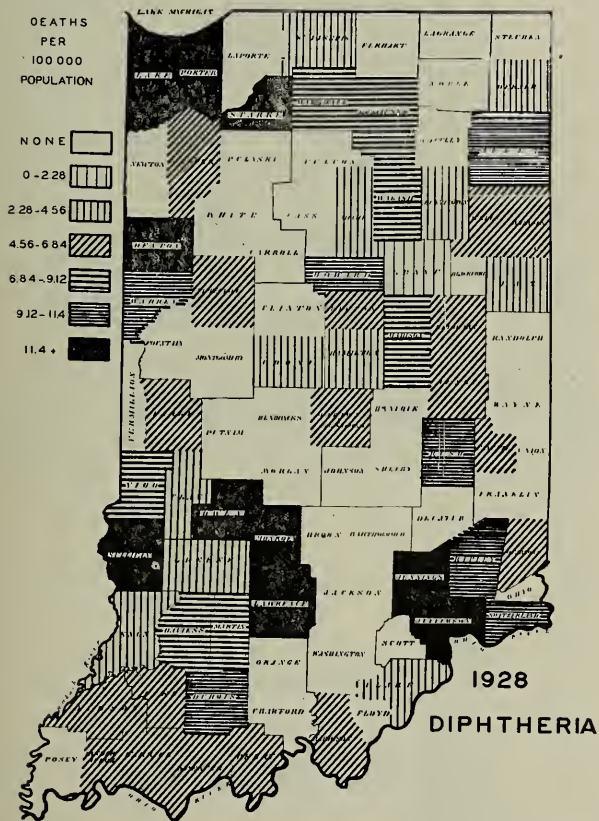


Fig. 7. Diphtheria Death Rates in Indiana, 1928.

A one-year map has a very large limit of error, but is used for the purpose of making a record of the immediate past so that a given community can know how it has stood in the immediately preceding years, a most important and valuable piece of information for diphtheria prevention work. Roughly the same foci are seen as in the last map, and there is indeed a general resemblance to several of the preceding maps.

The preceding maps seem to indicate that no absolute progress has been made in preventing deaths from diphtheria. Fig. 10 is made for comparison with the map for the period 1920-1924 (Fig. 5), being shaded on the same basis. It will be seen that the map is much lighter, and that every county has made improvement except

Martin county (which county has also improved if an average of several years were taken).

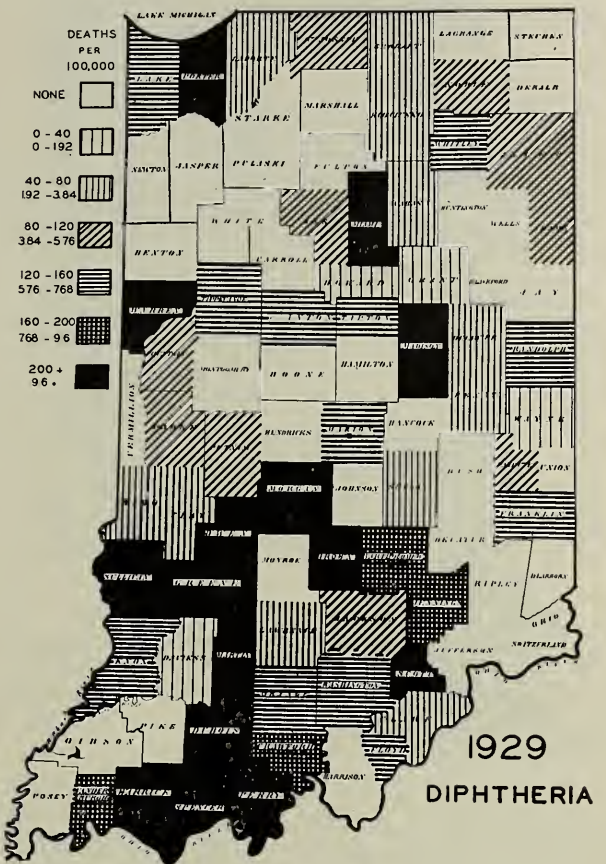


Fig. 8. Diphtheria Death Rates in Indiana, 1929.

The focus in southern Indiana is most evident. Other foci fairly well agree with those of preceding maps. Inasmuch as this map is for last year it should be studied closely by those interested in diphtheria prevention. Interesting is the fact that certain counties have reversed their shadings. Monroe after a bad year in 1928 has not a death. Scott county with no deaths for approximately ten years falls in the black column. Diphtheria is a disease that can be wiped out easily, or may flare up quickly after a long period of relative inactivity.

Diphtheria is commonly considered to be a "school" disease. As a matter of fact it is much more fatal to children under school age. Forty-seven percent of all diphtheria deaths occur in children under five years of age (about sixty percent in children under school age), and seventy-eight percent in children under ten years. It is true, of course, that the younger children commonly get the infection from their older brothers or sisters who are in school and it certainly is a serious school problem. While there is great need for protecting children under school age, it is very much easier to reach those who are at school, and as a result public health officials commonly make them their objective. In case of an epidemic the school should be kept open (except possibly in rare instances) and the fight waged from the school as a center.

Consideration of the data represented in Fig. 11 will impress the fact that the proper time for the immunization of children is before the end of the first year of life.

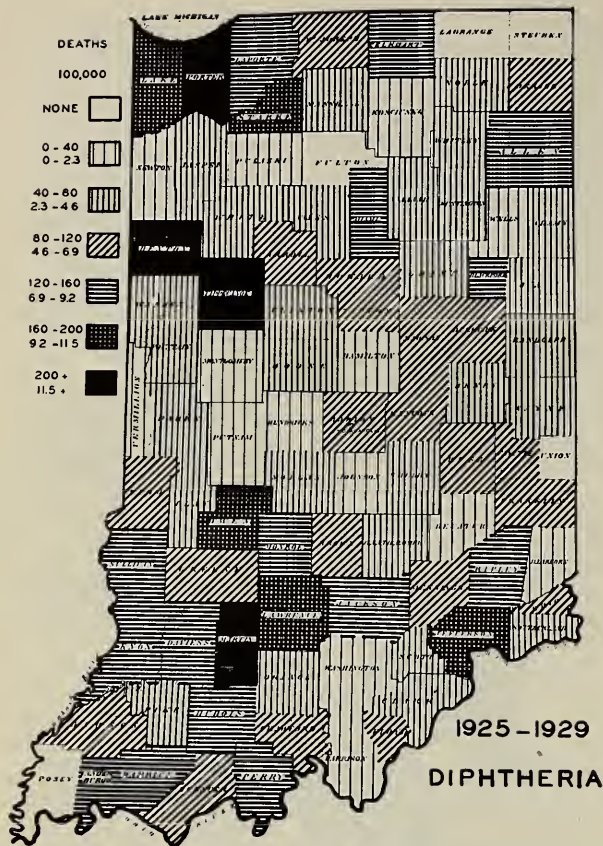


Fig. 9. Diphtheria Death Rates in Indiana, 1925-1929.

This map is made for comparison with those previous to 1925. Since it represents a five-year average it is more accurate than the maps for shorter periods. The focus in the southwestern quadrant is rather well defined, as are also the other foci which have been described elsewhere.

The effect of the seasons is shown clearly in Fig. 12. The relation of the school is suggested strongly, but it is quite possible that other factors are more important. The winter weather causes children to be kept indoors, and as a result many close contacts are made which would not occur in the summer time. It will be noted that the rate begins to fall in November and continues to fall until May, though school is still in session. The spring and summer months are the proper time for immunization, but it is hard to get people interested in what appears to be a "school" disease at that time of the year.

Sex would not be expected to play a role in diphtheria mortality, and this is found to be the case. During the years 1927-1929 in a total of 567 deaths, 280 were in males and 287 in females. In the United States Registration Area for the years 1920-1925 the males showed an insignificant excess in every year except one.

Race might be expected to be important. The negro is rather commonly more susceptible to various acute infections than the white race. In this case the relation seems to be reversed. The rate for Indiana was for the years 1927-1929: white, 5.8; negro, 5.2. Such a difference would be absolutely without significance were it not for the fact that a much greater difference in the same direction is commonly reported by the states that report

the rates separately. Fig. 13 gives the comparative rates for a number of states with large negro populations. The reason for this relation is not known. It has been supposed by some that it may

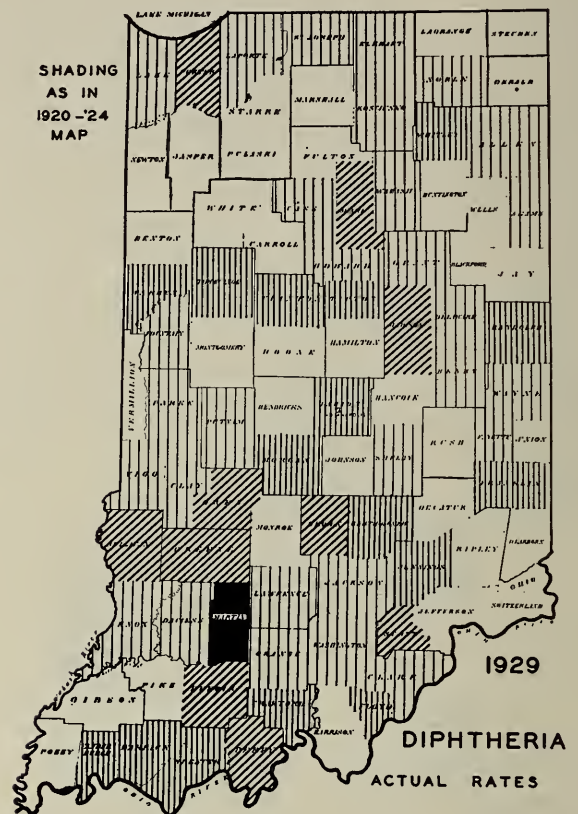


Fig. 10. Diphtheria Death Rates for Indiana, 1929.

1929 data graphically represented on basis of 1920-1924 rates. Relative maps as the preceding do not show that progress is being made unless the rates given with the legend are studied closely. The above map is shaded on the same basis as the map for 1920-1924 (Fig. 5). Every county had less diphtheria than in 1920-1924.

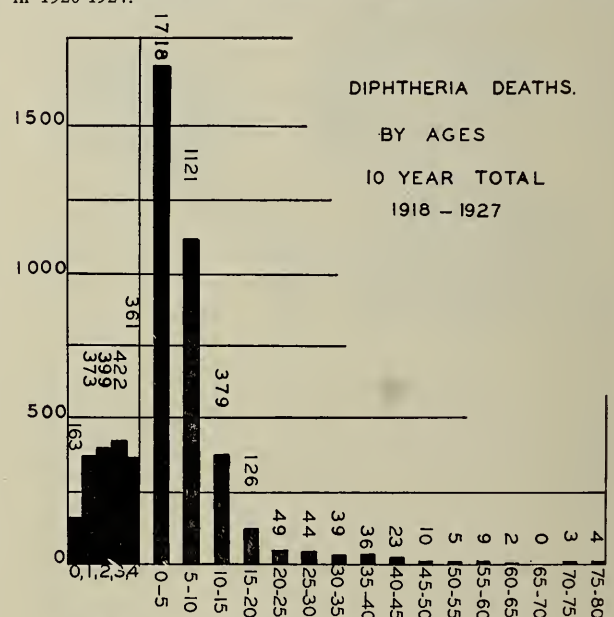


Fig. 11. Diphtheria Deaths by Ages in Indiana. The figures given are the totals for a period of ten years. Note that the group from birth to five is distributed by years inasmuch as this is the most important group. Note that most deaths occur in the preschool years. It is the child under six to eight years that needs protection most.

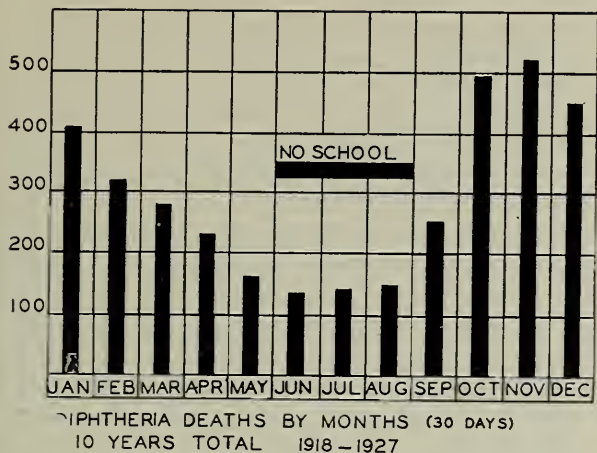


Fig. 12. Deaths from Diphtheria by Months in Indiana. The figures given are ten-year totals. The effect of the school months may be too apparent. The falling rates during the spring months—with school in session—indicate that season has something to do with diphtheria.

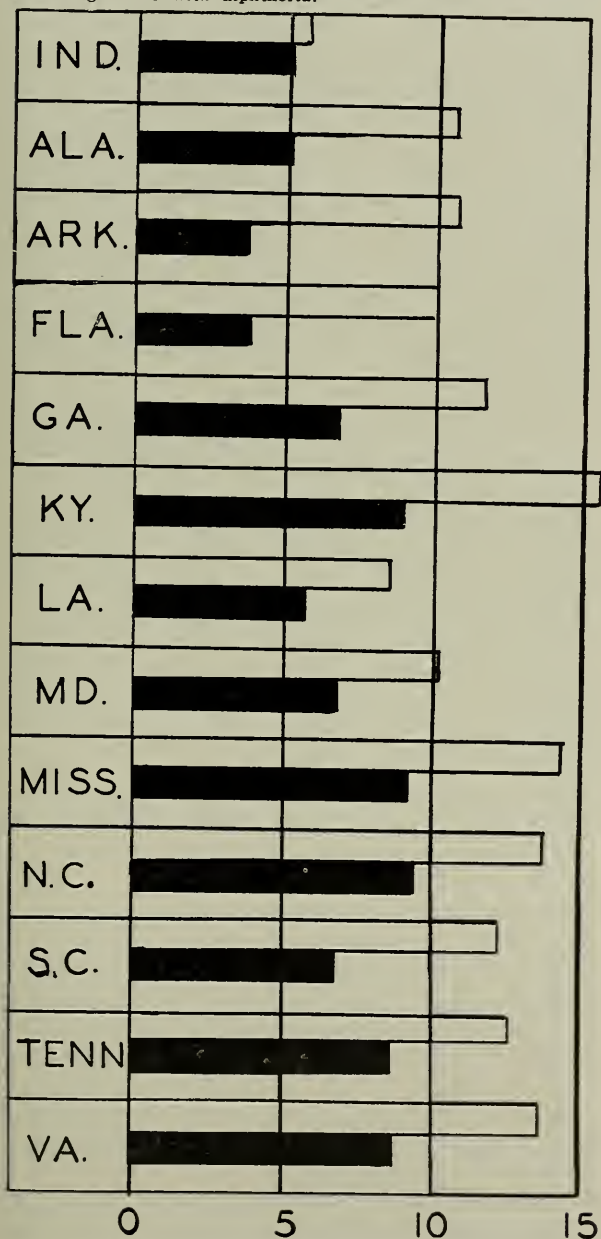


Fig. 13. Diphtheria Death Rates by Color. Rates for the negro are significantly less than for the white race. Negro..... Solid black. White..... Unshaded lines.

be due to a failure to report the disease in negroes. This seems an unlikely explanation because that would mean that the negro cases have been treated carelessly and that would certainly cause the death rate to be high.

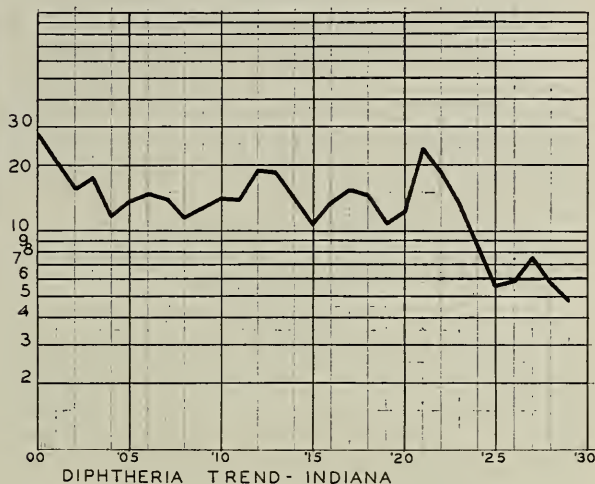


Fig. 14. The Diphtheria Death Rate Trend.

Trend graphs should be logarithmic for the reason that it is just as hard to reduce the rate from three to two as it is to reduce it from thirty to twenty. This graph shows that the progress of recent years is faster than in the early part of the century.

For the purpose of showing trend of rates logarithmic graphs are much more accurate and expressive. See Fig. 14.

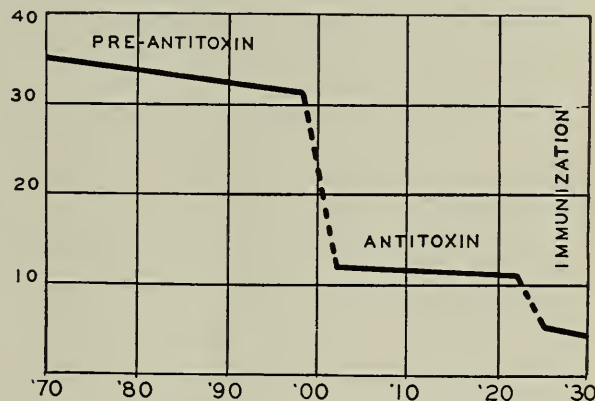


Fig. 15. Stages in the Conquest of Diphtheria.

The above graph is intended as only approximate. Rates in Indiana before 1900 are not known accurately, but the above estimate is probably low rather than high. Active immunization can and does have an effect that cannot be obtained from the use of diphtheria antitoxin as a passive immunizing agent.

Three distinct periods in the fight against diphtheria are represented in Fig. 15. Epidemiological control by means of throat cultures, isolation, quarantine, and fumigation are splendid, as are also modern methods of treatment, but the final control of diphtheria must come about through immunization.

Conclusions:

1. Rather consistently during the past twenty years the counties in the southwestern quadrant of the state have shown higher diphtheria death rates.
2. Three-fourths of all diphtheria deaths are in

children under ten years, and sixty percent in children under school age.

3. Diphtheria is a disease of the school months.
4. Active immunization will be needed to bring the rate to really low levels.
5. The year 1929 showed the lowest rate in the history of Indiana (4.8), which even so means that 158 children died needlessly of this disease.

We wish to thank Mr. Wright, Vital Statistics Division Indiana State Board of Health, for the valuable data which he has furnished us for the preparation of this paper.

SYMPATHETIC OPHTHALMIA*

E. M. SHANKLIN, M.D.

HAMMOND

MacKenzie, 1840, seems to have been the first to name this condition, though it had been recognized years before. Deutschmann had called it migratory ophthalmia; Oliver termed it transferred ophthalmia, while Elschnig entitled it anaphylactic uveitis.

The most complete, early analysis of this disease was that published by Schirmer. Later, in Norris and Oliver's System, Randolph presented a very comprehensive study of sympathetic ophthalmia.

Schirmer states that the first available reference to the disease is that of Bartisch, 1853. LeDran, 1741, makes the positive statement: "In severe inflammations of the eye, if we wait for pus to form the patient will lose his sight, from the infection which will spread to the other eye via the optic nerve."

MacKenzie thought that "while both blood vessels and ciliary nerves might play a role, the chief medium of infection is via the optic nerve and chiasm."

It seems that during the day of the percussion cap guns penetrating wounds of the eye were quite common, these due to small particles of the caps entering the eye. Wardrop had noted these injuries in the eyes of horses, noting that sympathetic ophthalmia was a very common occurrence in these animals. He also found that by destroying the offending eye, the fellow eye was usually saved. Barton later adopted this method of handling similar cases in humans, with no little success and is, no doubt, the first to use this method of prophylaxis.

While the intervening literature has much to say on the general subject, yet not until the Heidelberg Congress—1863—did there seem to be any concerted effort to study sympathetic ophthalmia by any considerable group of ophthalmologists.

Sympathetic ophthalmia is not to be confused with sympathetic irritation; in fact, many writers hold there is no inter-relation. Wood, "Encyclopedia of Ophthalmology," 1920, says "sympathetic irritation is but a reflex disturbance and, of itself,

never produces true sympathetic inflammation."

The etiology is as yet undetermined, though most writers seem of the opinion that it is due to a specific germ. Some of the older theories are (1) the toxic theory, (2) Meller's endogenous theory, (3) combined ciliary nerve-germ theory, (4) cytotoxic theory.

The symptomatic list seems to be a lengthy one, though many symptoms named are mentioned by but one reporter. Probably the first symptom is that of visual disturbance, followed almost immediately by circumcorneal injection. An ophthalmoscopic examination at this stage will show a spotting of Descemet's membrane. If a fundus examination is possible, one will find a blurring in the region of the disc. The iris now becomes discolored and there are commonly adhesions. The vitreous shows fine opacities, frequently numerous enough to exclude a fundus examination. There are noted small grayish-yellow discolorations in the iris. Chorio-retinitis, first noted by Graefe and later described by Hirschberg and Haab, is usually seen, after the first three or four weeks' duration of the disease. I was unable to recognize these characteristic roundish, sharply defined pigment areas in my case; if they were present they had disappeared ere I had a clear view of the fundus.

Randolph reported one case in which he had noted irregular patches of brownish pigment, with small oval area of atrophy—also a general pallor about the disc.

The tension of the globe is raised, some writers declaring a glaucoma commonly accompanies this disease. A shallowing of the anterior chamber is noted usually.

The slit lamp affords much service in the recognition of this condition, since it enables the observer to see cells in the aqueous and in the retro-lental space, these being positive signs.

Pathologically, the changes are quite numerous. We must remember that in the discussion of the pathology of the sympathizing eye we are handicapped from the fact that these specimens are rarely available. We commonly have access to the offending eye, but not to the sympathizer.

In the offending eye, which Wood so well terms the sympathogenic eye, the chief changes are always found in the uveal tract.

In the matter of diagnosis, the history is of the utmost importance, it being assumed, of course, that there has been a penetrating wound. The interval between the date of injury and that of inflammation is quite important, but not necessarily a dependable diagnostic factor. Some observers, holding to the germ theory of etiology, explain our long-delayed cases with the hypothesis that the germ may have entered into a latent form, to be aroused years later.

We should also bear in mind that this condition is more commonly found in children, at the age of puberty.

The character of the primary injury must have

*Presented before the Indiana Academy of Ophthalmology and Otolaryngology at the French Lick Session, December, 1929.

our closest attention, since wounds other than those at the limbus seldom produce this disease. Non-perforating wounds of the cornea may be classed as out of the picture.

An interesting sidelight is the fact that in our Industrial Court we hear much about the possibility of sympathetic disease; it seems our legal friends, having heard much of the subject, are constantly concerned lest their clients be subject to this dire affliction.

Another interesting observation, while looking over case reports, is that most of these cases result from small wounds in the ciliary region. I am wondering if this might not be due to the fact that we make an extraordinary attempt to save eyes with these small wounds, while most of us are prone to recommend immediate enucleation of the more grossly wounded eyes.

I believe one exception should be made. In the matter of the statement that these cases result from wounds about the uveal tract. That is in those rare cases of subconjunctival ruptures of the sclera; sympathetic disease is reported in some of these cases.

Browning made a rather exhaustive study of these cases, interesting himself chiefly in the blood changes, during the progress of the disease. He states there is a sudden and marked increase in the large mononuclears, immediately the disease is established. This observation led to the use of the arsenicals, chiefly in the form of the salvarsans.

The prognosis should always be a guarded one, notwithstanding the greater percentage of recoveries we find today. Prior to the present century, the prognosis was regarded as universally bad. Most modern writers seem to agree that if the case is seen during the first two or three days, we may expect more than a fair result. However, several would seem to disagree with this. Ball, 1927 edition, says, "Once it is established, it is rarely checked by treatment." Small, in the 1926 Year Book, says "if nothing is done until there are actual signs that the second eye is afflicted, it may be—and according to some certainly will be—too late." I should say that seventy-five percent would be regarded as a high average of good results.

In the matter of prophylaxis the first step is, of course, the prevention of these injuries. Nor should our activities in this direction be confined to the industrial world; we should use every effort to prevent the all-too-common scissors injuries. I have stressed this point in every visual conservation talk I have made.

The removal of every wounded blind eye is, of course, advisable, from the standpoint of prophylaxis; certainly this should be strictly observed in those cases in which the uveal tract is involved. Continued irritation of the wounded eye or frequent recurrence of irritation call for enucleation,

even though the offender be possessed of some vision.

The time of infection of the sympathizing eye, as relates to date of the primary injury, is of great importance. Probably the earliest onset of sympathetic inflammation is the case reported by Fuchs—five days. Some question may be raised in the Goldenberg case, in which he reported the interval as forty-eight hours. In the case I am reporting we have an interval of almost eleven years. I have done a prophylactic enucleation twenty-seven years after the original injury.

Nor are we always to feel secure, in recent injuries, even after we have removed the offending eye, as we find a number of reported cases in which sympathetic inflammation has developed after enucleation of the injured eye. Morax, of the French surgical service in the World War, reports two cases of sympathetic ophthalmia following enucleation and two cases following evisceration.

As to treatment, much has been said on this subject. Enucleation of the offending eye is, of course, the first thing to be considered. However, this is not the invariable rule, since the offending eye often has the better vision, as was true in my case. In the matter of therapy it is a case of "many are called but few are chosen;" the therapeutic pathway, in this disease, is littered with discarded drugs.

Generally speaking, atropine, the salicylates and the salvarsans seem to have weathered the storm and are still used. Atropine is to be used to full effect. The salicylates are to be used in large doses, one grain for each pound of body weight.

Recently, A. Vila Coro, of Chicago, formerly of Barcelona, reported some remarkable results from autoserum and atuto-hemo-therapy. The attention of the writer was directed to this by Dr. W. A. Fisher, of Chicago, about two years ago, who reported some astounding results in these cases. The technique will be discussed in the following case report:

Jay Y., age eleven, first seen by me in November, 1927, when he was referred because of frequent inflammatory attacks in the right eye. These attacks recurred at intervals of two or three weeks and persisted for several days. At the time of the first examination the eye was quiet. There was noted a small scar, at the limbus, at about seven o'clock, a bit of the iris being engaged in the scar.

The cornea was clear, pupillary movements a bit restricted on account of the iris being engaged in the scar tissue. The media was clear, the fundus negative. Vision, with correction, R. E. 20/80; L. E. 20/25. His correction was obtained from a competent oculist.

I made some minor changes in his correction, increasing his vision to a small degree. I suggested that enucleation would peremptorily put

an end to the inflammatory affairs he was having, but this was very promptly refused. I then suggested that the eye should be watched closely and at the slightest sign of irritation of the injured eye his family physician should be consulted; that in the event the fellow eye showed any irritation, to at once consult an oculist.

I explained the dangers of sympathetic ophthalmia and detailed the things that should be looked for during an attack in the injured eye. I felt reasonably secure in this advice, since we had an intelligent patient and family, and their family physician was quite alive to the situation.

I heard no more of the case until March, 1929, when the lad was brought to my office. I was advised that the right eye had had about the usual number of recurrent attacks, in the interval, and that some ten days or two weeks previous to this visit, the left eye had become inflamed. But a casual inspection was necessary to determine the present condition. The boy was in very severe pain; in fact, he was a sick boy. The tissues about the eye were moderately swollen.

Examining the eye, it was apparently a hopeless situation; the globe was an inflamed mass; the cornea was a smeary, almost unrecognizable thing. The portions of the iris that were visible were swollen and very much discolored, with numerous yellowish spots dotted about its surface. In the anterior chamber were numerous dots of bright red blood. The vision was limited to movements of large objects. The lad had had little sleep for some seventy-two hours.

The offending eye, strange though it seemed to me, showed no inflammatory signs. Its vision was the same as at the former examination. For obvious reasons I did not consider its removal.

I had the case examined by a confrere, who agreed with me in that we had a calamity before us, and joined with me in a very dark prognosis.

Local hospitalization was refused, and the next best thing was done—to send him back to Rensselaer, where he entered the hospital that evening.

Fifteen cubic centimeters of venous blood were withdrawn and held in a container for some twenty-five minutes, then agitated and allowed to stand for five minutes. Then the serous portion was drawn off and injected into deep muscle. Atropine was instilled, and the boy placed in a darkened room. He soon went to sleep, without opiates, and slept for more than twelve hours. I saw him the following evening, when he recognized me—with his left eye—and declared he felt "good."

A hasty inspection showed quite an improvement in the corneal condition, there being numerous areas that seemed perfectly normal. There was no longer any blood in the anterior chamber. The tension, which was appreciably increased the day before, was now apparently normal.

Arthritic symptoms, of which he had complained the day before, were now appreciably increased; he complained of his legs and ankles. We now

began the use of salicylate of soda, one grain for each pound of body weight. In passing, it may be mentioned that at no time did he complain of any tinnitus, notwithstanding the large dosage of the salicylates. I may also say that we had an unusually intelligent patient and he was so interested as to be able to discuss his symptoms in a very helpful fashion.

Three days after the first injection we gave him whole blood, the same technique being used in getting the blood, but this time we did not permit it to separate. It was withdrawn and agitated for five minutes, then injected into the deep muscle.

I saw him some twenty-four hours after the second injection, when our examination showed marked changes. The cornea was practically clear, the bulging iris was no longer a part of the picture and we had a moderately dilated, regular pupil. We made no attempt at a fundus examination. During the examination he recognized various persons about the room.

Whole blood injections were made, at intervals of three days, until he had had four such injections, plus the original injection of serum. Each succeeding injection brought forth much improvement and in some two or three weeks he left the hospital, after which he made visits to my office. While in the hospital his arthritic attacks became more pronounced, until he had quite a marked swelling of one leg and one wrist. Appropriate treatment seemed to relieve this in a short time.

All treatment of the eye was stopped after the last injection, but it was a matter of some two or three weeks ere we were able to see the fundus at all; then our view was quite obscured, due to the haze in the vitreous. Clearing of the media seemed a very slow process, but about July 15th we were able to go over the fundus quite well; we were agreeably surprised to find no changes of importance. Snellen vision was now taken and found to be 20/60, with which we were more than content.

Each succeeding examination showed some improvement in vision, however, and about September 1st we had 20/20, with his old correction.

He entered high school a few days later, much against the wishes of his mother, who feared disaster. I last saw him about December 1st, at which time the eye was normal and had normal vision.

This case seems to have presented some problems the solution of which I trust you will be able to give me. First, the exciting eye. All through the sympathetic trouble in the left eye, the right eye was quiescent; at no time was there any inflammation noted. It has remained so, which is one of the problems I mentioned. Prone to flare up at frequent intervals, it has now remained perfectly quiet for more than eight months. May we consider it "cured"?

The second problem is the arthritis—whence it came. Was it the result of the infecting agent;

if so, why was it not relieved by the treatment that proved so efficacious in the matter of the eye?

I present this case because of these two problems, also because of the very happy result in what first appeared to be a hopeless case.

RUPTURE OF THE PANCREAS WITHOUT EXTERNAL SIGNS OF INJURY

(Case Report)

W. D. GATCH, M.D.

INDIANAPOLIS

The patient who is the subject of this report was injured on July 18, 1928. He was standing on an empty hay rack in the gangway of his barn, with his back to the horses. The upper part of his abdomen was pressed against the topmost bar of the ladder rising from the rear end of the rack. Immediately behind him was the beam across the top of the gangway opening of the barn. The horses became frightened and gave the wagon a sudden jerk forward. The patient's body was crushed between the lintel of the gangway and the topmost bar of the ladder. Careful measurement showed that the clearance between these objects was four and a half inches.

The man was thrown to the ground. He fainted in a few minutes. Dr. J. A. Tully, of Newcastle, Indiana, arrived in about an hour after the injury. The patient was in agonizing pain, with his thighs pressed tightly against his abdomen by two men. His pulse was 100, and his blood pressure normal. He had not vomited. Doctor Tully gave him morphine and applied hot water bottles to his epigastrium.

The patient passed a fairly good night. He vomited for the first time twelve hours after the injury. Next day he vomited frequently and was very tender over the entire abdomen. The abdomen was not distended. The vomitus never contained blood. The temperature was 100.6, the pulse 100.

For the next ten days the patient's course was stormy. He ran an irregular fever as high as 104. He vomited frequently. His abdomen gradually became greatly distended. On the tenth day Doctor Tully gave the patient a barium meal. A plate showed one collection of barium in the fundus of the stomach and a second in the pyloric end of the stomach with only thin streaks of barium between.

The writer saw the patient in consultation with Doctor Tully on July 30th, twelve days after the injury, and made the following observations:

The patient was a small, emaciated man, very ill; under morphia. Temperature 101, pulse 106. Lungs normal. Heart normal except for rapid rate. Abdomen greatly distended, everywhere tender, and everywhere dull on percussion except for two areas of tympany. One of these, an area about four inches in diameter, was situated between the left anterior axillary line and the costal border. The other area, of somewhat smaller size,

was above the umbilicus. A marked wave of fluctuation was present.

We made a diagnosis of chemical peritonitis, with ascites, caused by trauma to the pancreas. The history of the injury made trauma of the pancreas very probable. The passage of time—twelve days—and the great size of the effusion seemed to us sufficient reason to rule out a bacterial peritonitis. Rupture of the stomach seemed unlikely because of the absence of blood in the vomitus, because of the x-ray findings, and because the man had taken at times and retained considerable fluid by mouth. The absence of any signs of internal hemorrhage made rupture of the liver and spleen unlikely. The distribution of the barium in the stomach I have observed in several cases of fluid in the lesser peritoneal cavity. It is evidently due to pressure from behind directed against the mid-portion of the stomach.

On August 1st, Doctor Tully made a short incision in the left flank and inserted a small rubber tube. Through this a great quantity of straw-colored fluid escaped. This relieved the distension in the lower part of the abdomen, but not that in the upper part, nor did it stop the patient's vomiting. It was evident that the effusion in the lesser peritoneal cavity was still present and was still compressing the stomach. The writer was, therefore, called a second time on August 2nd, and under nitrous oxide-oxygen anesthesia made a left rectus incision above the level of the umbilicus. On opening the peritoneum the gastrohepatic omentum was encountered. This was opened and a great quantity of turbid fluid escaped. The posterior wall of the lesser peritoneal cavity was palpated and necrotic tissue could be felt. Numerous areas of fat necrosis could be observed in the gastrohepatic omentum. Six Penrose drains were inserted into the various parts of the lesser peritoneal cavity and the wound closed about them.

The patient's condition was rather poor during the night following the operation, but it improved following the intravenous injection of normal salt solution and glucose.

The following day his temperature fell to normal, the vomiting ceased and he rapidly improved. The drainage was free for almost a month, and some drainage was present until October 14th. It was chiefly serous with some ropy material. Just before the final closure of the wound a large mass of necrotic tissue escaped from the wound. The patient is at present entirely well and his urine has been free of sugar.

It should be noted that the proteolytic enzyme of the pancreas is excreted in an inactive state and must under normal conditions come in contact with intestinal contents before it can act. There is reason to believe, however, that the ferment can be activated by other things. The fat-splitting enzyme is secreted in an active state. In the case here reported it is probable, therefore, that the

peritonitis was caused by the fat-splitting ferment.

Contusion of the pancreas uncomplicated by other injuries is a rare condition. Mosquot and Costanum, who reviewed the literature in 1923, collected fifty-five cases of contusion and eighty-eight cases of traumatic pancreatic pseudo-cysts. F. N. Dealy states that drainage and marsupialization gives a mortality of from three to twelve percent, while extirpation gives a mortality of from ten to twenty percent. Roeghalt, on the other hand, protests against the advice of text books to drain the pancreas after trauma because of the resulting high incidence of acute pancreatitis. The truth is that no surgeon has had sufficient experience with the condition to speak dogmatically of the best treatment.

The diagnosis immediately after the injury probably can be made with certainty only by abdominal exploration. If the patient survives for some time the diagnosis can be made, as in this case, by the history of the injury, by the physical findings, and x-ray examination of the stomach.

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SINUSITIS, CHRONIC POLYPOID, ATROPHIC TYPE—MULTIPLICITY OF CO-EXISTING DISEASES*

(Case Report)

JOHN W. CARMACK, M.D.

INDIANAPOLIS

In the case which I am reporting there are two outstanding features which I wish to emphasize. The first is the multiplicity and severity of general symptoms over a period of ten years, and the second the slight evidence of pathology in the nasal sinuses. That the primary source of trouble was in the sinuses is presumed from the fact that no relief was obtained until the sinusitis was cured.

The patient, Miss N. B., assistant superintendent of nurses at Indiana University Hospital, an individual of good physical development, keen mentality and rather of the high tension type, always had enjoyed good health previous to her thirty-first year in 1917, with the exception of frequent colds. Since that time there have been eleven hospital admissions with the following diagnoses: January, 1917, acute nasopharyngitis. October, 1918, influenza, following which chest symptoms persisted and a diagnosis of probable pulmonary tuberculosis was made and the patient was admitted to Sunnyside Sanatorium, January, 1919. Four months later while at Sunnyside there

developed an acute illness with the diagnosis of influenza septicemia, general arthritis, and gastro-enteritis. With a stormy symptomatology, chills, temperature 102 to 107, delirium, meningismus, etc., blood cultures and spinal fluid, however, were negative. Following the acute illness there persisted gastro-intestinal symptoms referable to the appendix. Appendectomy was done and the appendix was found to be adherent and chronically inflamed. In January, 1920, hospitalized for acute tracheo-bronchitis. In November, 1920, hospitalized for hyperthyroidism, which subsided with treatment. In October, 1922, patient developed chills, high temperature, pain in right upper abdomen, clay-colored stools, chalurua and albuminuria, white cell count 3000 to 6000—lymphadinitis in glands of gastro-hepatic ligament. Non-surgical duodenal drainage was done repeatedly with a later cholecystectomy. Pathological report. Normal gall bladder—cultures showed no growth. In 1926 tonsillectomy was done without satisfactory improvement. During the winter of 1927 there occurred an acute suppurative otitis media on the left side following a cold. From 1922 to 1927 there occurred frequent attacks of acute rhino-trachea bronchitis with nervousness, muscular soreness and stiffness and general ill health. Most of this time there was a p. m. temperature of one-half to one degree with a trace of albumen in the urine. In January, 1928, following a course of stock vaccines for colds, an acute traceo-bronchitis developed which was accompanied by stiff neck, sciatic neuritis and acute gastro-enteritis, this making the second flare-up of acute trouble following vaccine therapy. In 1928 patient was hospitalized by Dr. C. P. Emerson for study. A diagnosis of probable focus of infection in the sinuses was made and an E. N. T. examination requested. The complaint was general malaise, sciatic and muscular soreness, with a rather persistent temperature of from one-half to one degree in the afternoon. At this time the only general pathology found was x-ray evidence of gland and peri-bronchial thickening in the mediastium.

Examination of Throat: There is no tonsil or adenoid tissue present, having been removed three years ago. No evidence of swelling or inflammation in the region of Thomwald's bursæ. There is a slightly reddened, granular streak along the posterior lateral walls of the pharynx. Larynx is normal.

Ears: Left drum membrane intact, but retracted and lusterless.

Nose: On inspecting the nasal passages one had the impression of a little too much room in the upper part. The septum is straight. The turbinates, particularly the middle, stand out from the lateral walls. The mucous membranes are anemic and slightly yellow in the upper part of the nose. Under the middle turbinates the mucosa is glistening and somewhat edematous in appearance. No polyps, crusts or pus present. The ante-

*Presented before the Indiana State Medical Association at the Evansville session, September, 1929.

rior wall of the sphenoids was visible and probes were inserted without great difficulty into the normal ostii. Transillumination showed the frontal and maxillary sinuses extremely transparent. There is no difference between the two sides. A tentative diagnosis of posterior ethmoid disease was made on the pale, slightly edematous mucosa under the middle turbinates. Primary x-ray films were taken which showed some haziness in the posterior ethmoid group. This is described as mucous membrane thickening. The ethmoid septa, while distinct, seems very thin. The left sphenoid is also hazy. An attempt was made to fill the posterior sinuses with lipiodal by the displacement method, but only one or two ethmoids filled.

The left sphenoid was filled with lipiodal by inserting a needle through the anterior wall of the sinus and the patient sent to x-ray. Through a misunderstanding a lateral film only was taken and the report states the sphenoid was well filled, but there is no evidence of mucous membrane thickening. An A-P film was requested which showed evidence of a moderately thickened mucosa in the superior and lateral wall of the sinus. The lipiodal remained in the left sphenoid for about ten days. The right sphenoid and maxillary sinuses were studied by lipiodal injection and all showed very little if any thickening. A diagnosis of low-grade bilateral ethmoiditis and sphenoiditis with tendency to absorption or atrophy was made.

Free drainage of these sinuses was urged by Doctor Emerson, but on account of previous negative opinions, the severity of complicating diseases and what appeared to be slight sinus pathology, I was not at all sure the results would justify subjecting the patient to radical posterior sinus drainage. With insistence and moral support, however, this was done. On opening the ethmoids the mucous membrane was slightly thickened, and in several cells there were polyps filling the cells. A straw-colored serum was present but no frank pus. An exenteration was done, both sphenoids were opened wide and some mucous membrane thickening, principally on the left, was found. Cultures were taken and a non-hymolitic streptococcus was grown in pure culture. Autogenous vaccine requested.

Micro section of the ethmoid tissue was made by Dr. E. V. Hahn. His report was: "The section is edged by epithelium characteristic of a nasal sinus. The tunica propria is exceedingly edematous and infiltrated with lymphocytes. The mucous glands show atrophy. Vascular hyperemia is present. There are no giant cells, necrosis or other signs of specific infection."

Following the surgical procedure a temperature of 100 to 103 degrees persisted for four days, after which recovery was uneventful. On the fourteenth day vaccine therapy was instituted and continued daily with liberal increasing doses for

eight days. Following this the patient began eating, gaining weight and improving in every respect. Two months later, during an epidemic in the hospital, she developed an upper respiratory infection and the left ear (which had supplicated twice in the previous two years) became stopped and the drum ruptured during the night. Following this there began a dull pain and fullness which continued although drainage was free. Four days later, at five a. m. while in bed, there developed suddenly the most terrific vertigo I have ever witnessed. This was accompanied by vomiting, nystagmus and neck rigidity. It was thought likely there had been a rupture into the labyrinth. A mastoid operation was done immediately. The cells were filled with pus and there was bone softening in the antral area. The spinal fluid was clear, and the cell count six. Drainage of the labyrinth was not done because of its questionable value generally. Recovery was uneventful. The vertigo subsided in about one week. During the past one and one-half years this patient has gained eighteen pounds, is as free from colds as the average person, and in good health.

In the usual suppurative and non-suppurative classification of sinusitis the histologic changes are fairly constant and well understood. In the suppurative type the mucosa is thickened largely by an increased vascularity and transient cell content without fibrous hyperplasia. In the non-suppurative sinuses the tissues show more edema, fibrous thickening of the tunica propria, with perivascular fibrosis and constriction of the blood vessels supplying the epithelial surface. The above reported case, while falling into the non-suppurative class, does not have the massive hypertrophy or edema of the fibrous submucous tissue which is early observed clinically or by x-ray study. Instead there was evidently early fibrosis of the basement membrane, with constriction of the blood vessels and subsequent atrophy of the glandular structures.

It is my conviction that many of these cases escape our serious consideration through their lack of massive evidence of local pathology and are apt to be considered as one of the unfortunate neurotics. It is only by correlated study of the internist, the roentgenologist and the otolaryngologist that a true value can be placed upon the pathological findings and correct treatment applied. In closing I wish to emphasize the frequency of not only chronic chest pathology but gastro-intestinal pathology in these chronic sinus cases.

ERRATUM

On page 116, March issue, seventeenth line of the discussion of Doctor Ritchey's paper, by Doctor Garton, the second word should have been "buffer" instead of "bluffer" as printed.

SPECIAL ARTICLES

INDIANA UNIVERSITY SCHOOL
OF MEDICINE

(Seminar, March 28, 1930)

PRESENTATION OF MEDICAL CASES

CHARLES P. EMERSON, M.D.

Case I—Juvenile General Paresis: This case is one of paresis in a boy eighteen years of age. The chances are that his is a case of the lues of infancy. His father and two brothers now are under treatment for that disease, and this boy has none of the stigmata of congenital lues. The peculiar actions which led to a diagnosis of paresis began when he was fourteen years old. He was admitted to this hospital when fifteen years old. Now he is a typical case of general paresis, with marked mental reduction, typical epileptiform convulsions and typical spinal fluid. His spinal fluid gives a four-plus Wassermann, a marked Pandy's test, and on admission an almost typical paretic colloidal gold curve. It is to report the changes in this curve while under treatment that we present his case this evening. In 1927 the curve was 5532100000. Under treatment, in 1928, the curve began to flatten: 2332100000. Then—and this is the important feature of the case—it began to rise in its middle zone. (As a rule the paretic curve as the result of treatment merely flattens out. This curve has changed its type.) Early in 1930 it was 2233321100, and now it is 1233321000. This curve, a very different one from that on admission, merely suggests cerebrospinal lues. Of course, he has received the Swift-Ellis intraspinal treatment and now has a therapeutic case of malaria with severe chills.

Case II—Diabetes Mellitus of True Twins: The next case is interesting from both a medical and eugenic point of view. This young woman, twenty-eight years of age, has diabetes mellitus, a typical and rather severe case, with a daily output of from two to three percent of glucose in the urine and on admission a blood sugar of 292 milligrams of glucose per 100 cc. of blood. Since she has not responded well to diet only, insulin probably will be necessary to make her urine sugar free. She has been married for fourteen years and has five children, the youngest eighteen months old. From her history her diabetes mellitus began between two and three years ago.

The important point about this case is that she had a twin sister, and they were true twins, who in 1927 died in coma when four months pregnant of acute diabetes mellitus, apparently of less than one year's duration. The medical reports of this sister's case obtained from her physician (through our Department of Medical Sociology) are very convincing. Judging from their histories the diabetes mellitus of these twin sisters must have developed during the same year.

The family tree of these twins is particularly

interesting. One of their younger sisters, now seventeen years old, has the same disease; her father had the same disease, and also his uncle. You will note the marked familial tendency to diabetes mellitus in this family. Shall we call this patient's diabetes mellitus an inherited disease? To discuss this is the reason we present her case. Or, is hers a transmitted but not an inherited disease? Is there a difference? Because a disease comes down through three or four generations is it of necessity inherited in the biological sense—that is, through the chromosomes? These cases suggest chromosome inheritance since these true twins, the one living in New York state, and this girl in Indiana, both seem to have developed the same disease during their twenty-fifth year. But does this prove chromosome inheritance? I inherited my great-great-grandfather's clock, but certainly not through the chromosomes. It was transmitted to me. Can we speak of a familial transmitted, but not in the accurate sense "inherited," disease? For the biologists, studying flowers, flies and guinea pigs, this is an interesting academic study, but for us of the medical profession it is not, for we must take the blame for the results should the urgently proposed legislation concerning marriage, birth control, the sterilization of defectives, etc., be written into laws. That proposed legislation has gained its authority from the biologists who have studied the inheritance of the color of sweetpeas, of the red eyes of flies, and the long hair of rodents. Such anatomical characteristics may follow Mendel's law, but diseases like diabetes mellitus are not unit anatomical characteristics. Do we yet know that there is any anatomical characteristic which can explain diabetes mellitus and which is inherited according to Mendel's law? Supposing there is, are we sure that feeble-mindedness, dependency and criminality in any way follow the same law? If such eugenical laws are passed the responsibility will belong, not to the biologists who suggest possibilities, not to social reformers who exploit these possibilities, but to us of the medical profession. All laws should rest on only the best of proven evidence, certainly not on those analogies which have led some to group genius, criminal tendencies and feeble-mindedness in the same class as albinism in man and the red eyes of the banana fly. This case of diabetes mellitus presents a strong argument in favor of the chromosome inheritance of some sort of anlage of that disease, but even though we consider that proven we should wait for much better evidence before we, members of the profession of human biology and ultimately responsible for the life and health of society, give our professional approval to any of the eugenical legislation now so loudly advocated by social workers.

Case III—Encephalitis with the Parkinsonian Mask-like Face and Tremor of the Tongue Only as Sequelæ: This case is a man forty-five years

old with the results of a typical encephalitis. You notice he has the Parkinsonian facies, but he has not the tremor. Whether we should use the term "Parkinson's disease" as some do for cases in many ways so similar to Parkinson's disease but which follow encephalitis is a question. They may be similar but they are not the same. We could with accuracy say that they present the Parkinsonian picture.

Eight years ago this man suddenly developed diplopia and great fatigability. He has not worked since. Five years ago the mask-like facies began to develop, and during the past two years he has been unable to feed himself. Now he can sleep eighteen hours a day. While this man has a typical mask-like facies he has no Parkinsonian tremor of the hands, but he does have a slow tremor limited to the tongue and to the muscles just under the chin. I have never seen the tremor limited to just these muscles, although in this post-encephalitic group we do get very limited tremors.

Case IV—Congenital (?) Infantile (?) Cardiac Disease: This case is that of a young woman thirty years of age whose heart presents a most interesting picture. Whether this cardiac condition is truly congenital or whether it is infantile is a difficult question. The physical signs and the x-ray films suggest marked mitral and pulmonary insufficiency. The heart shadow is that of a huge heart, with an outline which suggests mitral insufficiency. On auscultation a loud systolic blow is heard, maximal at the apex and propagated into the axilla, but not loud over the base; and along the left sternal border one hears a soft diastolic blow, maximal at the second left intercostal space at the sternum, and propagated to the left clavicle. The pulse is irregular, from 54 to 116 to the minute. The systolic blood pressure is about 110 and the diastolic about 65 mm. Hg. The electrocardiographic record indicated ventricular preponderance, auricular fibrillation, and ventricular irregularity.

When this patient was a year and a half old she first showed a marked cyanosis and the beginning of the clubbing of the fingers. That cyanosis has been present ever since. Nevertheless, she insists that as a girl she was able to play just as hard as any of her friends, and without shortness of breath or other discomfort. She was married ten years ago, therefore when twenty years of age, and soon afterwards suffered a miscarriage followed by septicemia and phlebitis. She has not been quite as well since, nevertheless, for nine years she was able to do all her housework. It is hard to believe that a woman with a serious valvular lesion could have had such strength following so severe an illness. Less than a year ago began the shortness of breath and swelling of the feet.

The points to which we would now call your attention include the purple cyanosis of her lips,

and the extreme clubbing of her fingers and toes. You will note that she is a very well developed, mature woman. There is none of the dwarfism or persistence of juvenile characteristics which one expects in cases of congenital or early acquired cardiac lesions. She has the most extreme grade of Hippocratic fingers that we have ever seen. These are due not to any increase in the tissues of the finger tips but to dilatation of the capillary bed beneath the nails. She has the polycythemia of cyanosis—red blood cells 8,000,000 per cmm., hemoglobin 116 percent, and leukocytes 7,500 per cmm. She was admitted with generalized oedema, a large liver and spleen, and ascites.

Is this a congenital lesion? Congenital lesions are not the direct result of disease but are developmental defects. In other words, the heart does not develop normally; usually there is the persistence of some embryonic condition. Therefore, its myocardium, the heart's strategic point, free from disease, is capable of great efficiency. But the shape of the heart and its physical signs do not suggest any of the usual cardiac defects. This, however, does not rule them out. Is it a case of endocarditis developing in a baby at eighteen months of age? If so, it is strange that the body growth has been as normal and that cyanosis and extreme clubbing of the fingers have been the only evidence of cardiac trouble, for endocarditis is only part of a carditis which always includes the myocardium and with a mitral defect perfect compensation is scarcely possible. Whatever the primary condition, the present illness easily could be due to a secondary implant of an infection on a valve which may have been merely deformed or previously infected, but in either case a point of least resistance. This is a common sequela.

Now that she has lain flat for a few minutes you will see that she has a black cyanosis and yet lies with head low with very little discomfort. What does that mean? Cyanosis formerly was interpreted as evidence of a damming back of the blood due to a lack of power of the heart to push it forward fast enough. Now it is considered as more of a protective mechanism which pools large volumes of blood in the skin, in the lungs, liver, and splanchnic areas in order to decrease the volume of the flowing blood. The clubbed fingers also are evidence of the tendency of the body to create such pools. In the circulation it is the speed of the flow of the blood which is to be kept most constant, not its volume. If, therefore, the speed of flow is constant the work of the heart will depend on the volume of blood pushed forward. By pooling, for illustration, two litres of blood, therefore, the work of the heart has been decreased about forty percent.

PRESENTATION OF PEDIATRICS CASE

O. F. ROGERS, M.D.

I wish to present at this meeting a child aged one year and two months, who was first admitted

to the Riley Hospital when two months of age with the following history:

Her birth had been normal and she had gained weight normally. At birth there was noticed upon the right side of her neck a reddish-purple area about the size of a half-dollar. This area increased in size as the child grew, until at the age of two months it covered the right side of her cheek, right side of her neck, and extended beneath her chin. Upon physical examination it was found that this area was soft in consistency, elevated, somewhat fluctuant, and about the size of her head.

The laboratory work showed the urinalysis to be negative. R. B. C., 4,600,000; W. B. C., 7,600. Differential count within normal limits. A tentative diagnosis of hemangioma was made, and the patient was furloughed and advised to be returned at six months of age for radium therapy. She was returned at that age and her condition remained the same. Ten mg. of radium were applied for two hours; afterwards she ran a temperature of 103 degrees for one day. When temperature-free she was furloughed and advised to return in one month for further treatment, which was done. In all she has had over a period of five months five such treatments. In that period of time the tumor mass has decreased to approximately one-half its original size.

PRESENTATION OF SURGICAL CASE JOSEPH CLEVINGER, M.D.

I wish to present a case from the surgical department of the Long Hospital, nothing very spectacular, but which has given some other people some difficulty. His thumb was injured on January 8th when it was struck by a basket ball, causing a posterior dislocation. The physician who cared for him the night of his injury tried to reduce the dislocation, both with and without anæsthesia, but was unable to do so. The following day he opened up the joint, and we understand from the patient that reduction was obtained, but they were unable to hold the thumb in place. As you can see, he has a posterior dislocation, with a marked amount of atrophy of both sides of the thumb. This injury is now almost three months old and he has practically no use of his thumb; he is unable to oppose it and the first finger with any strength. It now is our problem by operative procedure of some kind to correct, if possible, the deformity.

The chief difficulty in the reduction of this type of dislocation is the fact that the long flexor of the thumb, lying around the head of the metacarpal, cannot by traction in a straight line reduce the dislocation. It must be reduced first by hyperextension of the thumb on the metacarpal to relax the pull of this long flexor of the thumb, and at the same time to pull back the anterior annular ligament and remove this from between the head of the two bones. In other words, the mechanics of the dislocation must first be brought to a

greater degree, then quickly flex the thumb over the end of the bone.

The x-ray film showed a tearing fracture at the end of the metacarpal bone and much soft tissue swelling but no infection at this point. We feel that with a little work we can give him a pretty fair joint.

The second case I wish to show is that of a man fifty-four years of age who was injured on March 13th. He was riding on a load of hay when the wagon overturned, and the wheel of the wagon struck his knee. X-ray examination when he came to the hospital showed a stellate fracture of the patella. The following day another patient came to the hospital also with a fracture of the patella, who had been injured in an automobile accident. I desire to call your attention to the marked swelling which occurs in these fractures. This man had about twice as much as is present now. You can see the discoloration extending almost to the ankle and well above the joint. The fracture fragments in this case had not separated, so we applied a splint with a slight amount of flexion to relax the pull on the long flexor of the thigh. We were undecided at first whether we should do an open reduction, but at present, two weeks after the injury, the x-ray films show the fragments to be in good position, and we believe we will not have to open the joint.

The other case of fractured patella is not here; he was discharged this morning. His was a transverse fracture on admission. The fragments separated from one to one and one-half inches. He also had a marked amount of extravasation of blood, extending upward more than downward as in this patient. In his case we took a strip of the fascia lata from the same thigh and formed a loop through holes which had been drilled in both the proximal and distal portion of the patella, crossed the two ends, sutured them well into the joint, and closed the capsule with chromic catgut. The thing we noticed particularly in his case was the large amount of blood beneath the fascia lata. It extended as far up as our incision, which was almost to the trochanter. The joint cavity itself was also filled with fluid and clots. We do not like to open these joints unless we feel it is necessary in order to appose the separated fragments. The blood present in the joints offers a fine field for a severe infection which can result in almost complete loss of the leg and in some cases lead to its amputation. We are, therefore, careful when we do operate to use a conservative technique that will prevent infection.

Since the Long Hospital has been opened, ten cases of fracture of the patella have been admitted. Of these three were sutured with silver wire, and three with linen and chromic catgut to the capsule aponeurosis. Three other cases were treated expectantly with splints and reduction apparatus. One case refused to be operated and was sent home a few days after admission.

A variety of methods have been used in taking care of this type of fracture. "Dakin's Operative Surgery" gives seven different techniques. In the nine cases we have had, four or five different methods have been used.

THE PSYCHOLOGY OF MENTAL DISEASE

MAX BAHR, M.D.

Mind is known only through its operation. I am conscious of my mind from evidence within. I believe that others have mind because they act in the presence of outward conditions as I do myself under similar circumstances. Their reaction to environment is similar to my own.

Mind shows a process of development. For example, nothing is so helpless as the human infant at birth. Unlike the chick, which as soon as it emerges from its shell helps itself to food and flees from danger, the child is utterly dependent and without means of self-preservation or protection. It lives during the early weeks of its life a purely vegetative existence. At three months of age, or thereabouts, the child is said to "notice". That is to say, it takes cognizance of what comes before it. It follows with the eye a candle or a ball of yarn, watches for it and associates pleasant sensations with it. It seems to perceive that the candle or the ball of yarn is the cause of an agreeable feeling. This conscious recognition, this perception, is the first step in the development of the mind. When first a nursing bottle is placed to its lips, these close down upon the nipple and the operation of sucking begins. There is an impression conveyed by the taste organs of the mouth, through corresponding nerves, to the sensory or special sense-centers in the brain; from these centers impulses are reflected to the motor nerve-centers in the brain and through the motor nerves back to the muscles. In other words, the operation of sucking is at first a purely reflex act. Later, the child watches for the bottle of milk, sucks in contents when offered, or helps itself if the bottle is placed in the cradle.

The idea that I want to convey is that the mind is an adjustive mechanism, or more properly, a complex of adjustive mechanisms. To give an illustration: A man in the middle of the street sees an automobile dashing towards him. It is because this man has a mind, served by numerous sense organs that bring into it information about his environment, that he is able to use this visual stimulus, assimilate it to similar experiences, and profiting thereby, to initiate certain activities calculated to remove him from the path of the automobile, and by so doing to effect a relation between himself and his environment that may save him from injury and perhaps death.

The man in the example just given sees and hears the approaching automobile dashing towards him, but he is able to appreciate this danger only because he has had innumerable previous experi-

ences in seeing and hearing to which he can relate this present experience. The new-born babe in the same situation would derive no such information from the same set of conditions. It is because the man knows the meaning of these experiences that he is able to initiate the proper movements and so to control his body as to remove it from danger. Such possibilities of reaction as described are plainly the result of experience extending over all the years of life, of the continuous coming into contact with all sorts of external conditions which have to be reacted to.

The adjustive mechanisms of mind are also to be considered as protective mechanisms and can be compared with known reactions of the same character in the physical realm in which mind plays no part. I refer to the bodily reactions, defense and compensatory reactions we may call them, to various inimical agencies that may operate against the organism. As an illustration, we know the body defends itself from the invasion of micro-organisms and bacterial poisons; that the invader is attacked actively and there are developed antibodies to counteract the injurious effects of toxins. We know that sometimes these efforts are fully successful, that sometimes in the face of an overwhelming invasion they fail absolutely and the individual dies, and that sometimes there is a compromise; the life of the host is saved, but at the expense of more or less injury to the body. These are typical defense reactions.

Then we have also reactions that are more noticeably compensatory. Injury and disease frequently result in deformities—for example, a curvature of the spine, and when this takes place we can see the development of a compensatory curve elsewhere in the spine in the opposite direction so that the erect posture is not jeopardized. The man who has lost his legs develops tremendous strength in the muscles of his arms and shoulder girdle, so that he can use crutches and get about with facility. If the pathological changes are brought about slowly it is astonishing how well the body can adapt itself to new and unusual conditions. We have in our laboratory, for example, a tumor of the brain as large as a man's fist which distorted the brain by pressure in every direction, but which had produced hardly any symptoms until the last few weeks of the patient's life. We have all seen marked distortion of viscera, the migration and final extrusion from distant parts of foreign bodies, and hosts of other examples of the wonderful capacity of our bodies for adjustment to conditions out of the ordinary. It is to this class of physical defects that I desire to call attention, for the purpose of pointing out analogies with certain classes of experience in the mental sphere.

The conception of consciousness is that subtle something through which we are made aware of ourselves, of our environment, of our relation to society, and by means of which we act, and think

and feel intelligently. Consciousness arises only under conditions of conflict, of increased resistance, conditions of great complexity compared with the facile reactions along the definite lines of a reflex arc. When in the path of an electric current a complex network of wirings is introduced that increases the resistance to the passage of the current, we find that accompanying its passage there is a marked rise of temperature. As heat accompanies increased resistance in an electric circuit, so consciousness accompanies increased resistance in the mental circuit.

We must think, then, of full, clear consciousness as accompanying only those mental states of adjustment to new and unusual conditions—conditions permitting of various reactions and involving, therefore, selective judgment, critique, choice; in short, reason. And in proportion to the frequency of the repetition of the same adjustment the accompanying mental state tends to sink out of the field of clear consciousness. If we will consider the infinitude of adjustments the individual has to make to his environment we will see that this is a conservative process. As soon as a given adjustment is well formed it is pushed aside and the field of clear consciousness is left free for new problems for adapting the individual as a biologic unit to his environment. This adjustment to environmental conditions is not, however, limited to a passive moulding of the individual by the environment, but has an active side. The individual reacts upon his surroundings and endeavors to shape the world of phenomena in accordance with a plan he has in mind. He tries to mold the world about him to suit his needs, his desires.

It will at once be apparent from the conception of mind as being acted upon by the environment, and in turn reacting to the environment under the stimulus of desire, that conflicts must ensue constantly between desire and attainment—conflicts that may reach satisfactory conclusions, may rest in a compromise, or may result in failure.

It is from these points of conflict between the environment and the individual, forced either from within or without, and inimical or destructive in tendency, that there arises the type of reaction to which I desire to call attention and which corresponds to the defense and compensatory reaction in the realm of the physical functions.

We are constantly meeting with evidences that suggest the intimacy of the relation between mind and body. This is well illustrated by conditions where a certain state, either of mind or body, gives rise to certain results in the other. For example, fear is a mental state and of mental origin, but many physical changes follow closely upon its heels: the rapid pulse, cardiac palpitation, vasomotor disturbances, as pallor and dilated pupils, secretory disturbances, as sweating, tremor, etc. On the other hand, the effect of the physical upon the mental is well seen in the toxæmias, as uremia

and alcohol, in the mental states that go with certain diseases, as Basedow's disease, Addison's disease, and general paresis.

Experience in thyroidectomy for exophthalmic goitre shows how very important the mental state becomes in relation to the physical. The success of this operation, as you know, has been shown to depend in no small measure upon the possibility of orienting the patient to the operation so that conditions will be favorable so far as the mental state is concerned.

One of the simple mental defense reactions is forgetting. Analysis of examples of forgetting indicate that it is not the simple process it is usually supposed to be; that it is not, in many cases at least, a passive process at all, but also is eminently both active and selective. Forgetting, in other words, is a means of defense, for it is the disagreeable and painful experiences that are characteristically selected. Recall some embarrassing situation you may have experienced in the past; recall your active attempt to put it out of mind, and at least your partial success; then compare the disagreeableness of having these remarks perhaps remind you of it, and you will realize how much that is unpleasant you have been spared. This forgetting is a conservative reaction, actively putting out of mind that which is disturbing and painful. Sometimes considerable portions of time or a whole series of connected events are dropped out of consciousness in entirety, as it were, and it will be found on analysis that these circumstances, amnesias as they are called, characteristically relate to painful events, as, for example, the horrifying experience of a tornado. From being so gross and obvious the process of forgetting often occupies itself with small affairs. One of our patients for certain reasons was not fond of her husband; in fact, entertained a certain resentment toward him. He provided her in the hospital, among other things, with books to read. Invariably, however, almost as soon as he gave her a book it was mislaid or lost. The book was a concrete reminder, it originated a painful emotional experience, so she defended herself from this source of unhappiness by losing it so it could not arouse any unpleasant memories.

This example of the book-symbol shows well the mechanism by which a painful subject may be surrounded by danger signals, as it were, warning that any further progress in that direction might be disastrous. In this way a disagreeable or painful memory may be surrounded by a wall of defense which may grow in extent and circumstance until there is hardly any approach to the personality at any point.

This is also well illustrated by one of our cases that was committed to us by Judge Collins of our criminal court. This patient had been declared insane by a jury after her trial on a murder charge. She was in bitter conflict with her hus-

band, who had deserted her rather abruptly and disappeared with another woman. In a state of most intense mental anguish she attempted suicide, but before doing so she murdered her five-year-old child by administering chloroform. The patient herself was unsuccessful in her suicidal attempt and after she came to the realization that she had murdered her child she became even more desperately determined to kill herself. The attempts were never successful because the individual was placed under close and constant supervision. The painful conflict with her husband and this most terrible deed of having killed her child, and the feeling of remorse associated therewith, constituted a very painful complex in the individual which she attempted to crowd out of her mind, or, in other words, to repress into the realm of forgetfulness. At this the patient was fairly successful, but it occurred at the expense of the integrity of her mind. She would have recurring attacks of amnesia in which in a sort of delirium she would live over and over again the terrible experiences that she had gone through but of which she had absolutely no recollection, because these attacks would occur autonomously and independently of clear consciousness. In the interval between the attacks she would forget all about the horrifying experience and would go about her daily work in a perfectly contented manner as if nothing had ever happened. We see here the mechanism of forgetting constantly at play. Thus in the painful, disagreeable experiences of this woman her mind in its protective, conserving effort tended to avoid, to put them aside, to consign them to the region of the forgotten. This patient in about a year made a complete recovery.

Compensation is another type of reaction which is provided as a mechanism of defense. For the sadness and sorrow, the blasted hopes and disappointments, the trials and tribulations, the mind again comes to the rescue. We all understand the young woman, disappointed in love, who takes to the nunnery and devotes her life to the service of others. We have all seen men, under similar circumstances, plunge into the illusive forgetfulness of alcohol and morphine. So these compensations play a large part in our daily life and are a tremendous force against the "slings and arrows of outrageous fortune."

Among the very common types of compensation are the wishfulfilling dreams and the wishfulfilling deliriums. We are all more or less familiar, for example, with the remarkable life of imagination which children lead, how they live in a world of fancy, peopled by the creations of their own minds and teeming with events of the most dramatic interest. For hours these little ones are at play in a world all their own, associated with kings and queens and waited upon by mighty soldiers; also their hours of sleep they find in the land of dreams their hopes and ambitions all realized.

In further considering this mechanism of compensation we are all familiar with the great sorrow that turns out to have been a blessing in disguise. We have seen harsh, severe characters made mild and sweet by illness, and we know of misfortunes that have brought out great strength of character and efficiency in an individual that up to that time had shown only weakness. We have seen time and time again the disappointed and bereaved turn to the consolations of religion. These are the usual experiences, but the mechanism of compensation is more widespread than these simple instances would indicate.

The character by which we are known is often the result of this sort of situation of the inner conflicts. People who are known for their wit or cynicism are often persons sad at heart who have developed a character which expresses quite the opposite of that which they really feel, and as in the phenomena of immunity the bodies developed in the organism to antagonize a poison are always developed in greater quantity than necessary, so here the reaction goes beyond the requirements, and the wit and cynicism become obtrusive features in the character. It is these inner conflicts, the result of the discrepancy between desire and the possibility of accomplishment, that furnish much of the energy, by a process of sublimation, for our activities. It is a commonplace that the love-sick maid or youth may have such interest distracted by social activities and amusement, the energy of their conflict being drafted in other directions. In the same way, the beautiful things produced by the artist are often the result of sublimated energies devoted to his art. These inner conflicts must be handled in some way. In the weak and poorly organized they literally tear the individual apart and only too often make nervous invalids or even result in chronic deteriorating psychoses.

It is no empty phrase, "An artist is wedded to his art." In a life of sorrow, bitterness and disappointments his art offers him the only avenue of expression and in the oblivion it brings he finds his only happy moments. So we find innumerable examples of men who have brought things to pass, creative geniuses in all walks of life, who have been torn by inner unrest, but who have been able to turn all their magnificent energies into their life work—to sublimate.

Let us turn again to Nature's great psychological laboratory, the mind deranged. Here we find compensatory mechanisms which are quite characteristic. Take one of our cases in the institution at the present time. This man first had numerous delusions of a grandiose character which later were followed by delusions of persecution which are now quite fixed and systematized. A brief analysis of the case is as follows:

This patient is now seventy years of age, and in his prime was the general agent for one of the largest eastern insurance companies, represent-

ing several states and at one time commanding a salary of about \$25,000 a year. Later, his business began to fall off very decidedly by reason of his increasing inefficiency, and he was finally replaced by another representative. He became conscious to a certain degree of his failing efficiency and became protected from this painful consciousness by the mechanism of compensation so that he developed numerous grandiose delusional ideas. For example, he made preparations to sail for England with the belief that he could write the various heads of the European governments with large policies. When attempting to leave on this trip he had but a very small amount of money on his person, at least not any more than would take him to New York, from which port his steamer was to sail. He was then taken in charge by his friends and removed temporarily to a private institution. After a few weeks, when he was admitted to our institution, his grandiose delusions had disappeared to a great extent, but were replaced by well-fixed, systematized delusions of persecution. These were developed by the mechanism of rationalization and were of secondary nature. As the patient was not permitted to carry out his grandiose schemes because he was prevented from doing so by being taken in charge, he developed ideas of persecution in which people were interfering with his affairs by kidnapping him. Also, he believed there was a concerted plot to get him out of the way and that efforts had been made even to poison him so that he might not be able to carry out his contemplated schemes.

In this case, as in similar cases, the grandiose, exalted ideas associated with delusions of persecution are protective devices erected as a result of a compromise between desire and accomplishment. The grandiose delusions in this case protected him against an inferiority situation in which he has fallen off in efficiency, and the persecutory delusions have protected him further in projecting the offending complex on to others whom he accuses of incarcerating him in an institution and thus interfering with his ability to carry out his grandiose schemes. In such cases with delusions of persecution the mechanism is the same as in the sane, inefficient carpenter who blames his tools for his inferior workmanship, except that in the insane individual the mechanism is carried to a further degree.

The mechanism of rationalization, by which is meant the giving of false reasons to justify our conduct, appears continually on all sides. For example: The drinker who drinks when he is hot to cool off; drinks when he is cold to warm up; when he is joyous to celebrate, and when he is sad to drown his sorrows. All of which simply means that he cannot control his habit, so he must find a good reason for indulging it and so justify his conduct to himself. Go down in your own soul and recall your reasoning when your program for the day was filled with work and a beautiful

summer's day beckoned you to a baseball game or some festivity. We all indulge in the weakness, but some do little else their whole lives long but invent some excuse for being idle.

Sleep is one of the best-organized types of defense. We do not sleep because we are fatigued. We sleep long before the deleterious effects of fatigue can damage the organism. Sleep is a biological defense against fatigue. We sleep so we may not become fatigued.

The mechanism of conversion is one in which psychic phenomena are converted into physical symptoms. This form of reaction is noted frequently in hysteria. Since the psychomotor levels are relatively low psychomotor outlets furnish channels of least resistance and thus psychic phenomena express themselves along muscular lines.

A more baffling method of the manifestations of the complex of conversion is in the form of symbolism. Much of our thinking is conducted in words or their visible signs, visible signs standing for individual words or whole sentences. For example, the shrug of the shoulders in dubiety or deprecation; movement of the head in negation or affirmation; and muscular expressions as a means of communication by the thumb. The trend of thinking and expression is with great frequency determined through ocular percepts, and the realm of object-symbolism is far more extensive than the individual is aware of until he turns attention directly to the subject. The oak suggests sturdiness, ruggedness, and strength of character; it has limbs, trunk and heart. Stone is the symbol of hardness, and there are corresponding hearts of flint. The volcano vomits forth its lava stream, and the earth clothes itself in a green garment. The position "up a tree" is embarrassing and difficult, as many a cat has discovered. One charged with contempt of court often may be cleared of this charge if satisfactory explanation is given. The symbol of the serpent is as old as mythology.

It is in the realm of dreams that the phenomena of symbolism manifest themselves in all their richness. The dream-consciousness is uncritical. Ideas come and go without direction; the whole scene shifts without calling forth even an exclamation of surprise; the faintest resemblance is enough to cause one object to symbolize another.

The application of symbolisms in the insane is as frequently resorted to as in the sane. We meet the phenomenon of symbolization constantly in the psychoneuroses. The psychoneuroses have their inception in a region of consciousness that is removed from the bright light of conscious awareness, a region that is not in the focus of attention and where critique is in abeyance.

I also wish to emphasize here that mental states are always the outcome of other mental states from which they necessarily issue. This is true throughout the realm of psychology, normal and abnormal. It is true even in the realm of the

psychosis due to organic changes in the brain. That an alcoholic should have a delirium may be dependent upon a toxæmia, but whether he sees in his delirium various weird animals, or visions of the infernal regions, must depend upon purely psychic causes, upon the pre-existing psychic material which has been involved in the disorder. It implies, for example, that every psychosis, if all the facts were known (by which is meant internal, conscious facts), would be found to have arisen as a logical necessity, step by step; that every state of mind should theoretically be capable of reconstruction from the elements of which analysis shows it to consist.

So we see how the mind develops certain modes of reaction which are aimed at adjustments with the surrounding conditions, or, as we say, "getting square with events." We see, too, that when disease has pulled the superstructure to pieces and it comes tumbling down in ruins, the same efforts at adjustment continue but are expressed in a much more imperfect and incomplete way. The difference between the sane and the insane, however, as I have previously emphasized, and as you can ascertain readily from the above illustrations, are only differences of degree, not of kind. Every process that may be devised in the insane mind has its counterpart in the sane. In the insane the complexes determine largely the symptoms of the mental disorder, while in the sane they are at the bottom of the moods, the disposition, the make-up, the character of the individual, and it is the organized pattern that determines its actions along conventional lines—lines prescribed by training and custom. Consider, for example, the changed feeling of shame which affects the modern woman in the matter of dress. The dictates of fashion in this instance have determined the inherent impropriety of the exposure of their limbs above the knees as a conventional form of modern dress.

Everywhere about us we see continually efforts made at adjustments to the environment in which we live, and just as general practitioners you see in the physical realm, living creatures constantly at war with their surroundings, developing weapons of offense and defense, succeeding, failing, but more frequently coming to some compromise in the struggle, so we as psychiatrists look upon the world of minds and see each individual in just such a struggle, with similar results.

THE FUTURE OF NURSING EDUCATION

EDWARD THOMPSON, M.D.

The future of nursing education at this time is problematical, and is the cause of much discussion and comment among nurse educators, hospital administrators, and even the lay public. My remarks will be presented from the standpoint of the disinterested hospital administrative insofar as it is possible for me to do so and it must be understood distinctly that the views, opinions, and

suggestions presented are not necessarily those of the Indiana University, its School of Medicine, or School of Nurses' Training.

The rise of nursing, from an ideal to its present professional standing, has been rapid but not without its difficulties, as is to be expected of all progressive movements. Nursing now numbers over 100,000 members, and is the second largest group of professional women in the world. The early schools for nurses' training were founded on the principle of service to the sick and their students received training by serving an apprenticeship. This is understood easily when we remember that the life of Florence Nightingale, to whose memory all schools are dedicated, was the expression of service to the sick. However, we have wandered far away from these original schools. Education has worked its way insidiously into the school until today the modern school is established on the basic principles of, first, education of the nurse; second, service to the patient.

These two principles are fundamentally far apart. It is hard to conceive of an institution founded on such principles progressing smoothly and harmoniously. From the standpoint of the hospital, service to the sick comes first, last and always. From the standpoint of any school of education, irrespective of whether it be a nurses' training school, medical college, or any other institute of learning, education of its students is its principal purpose or function. Let me quote an address of Doctor Ahearns, Board of Regents, Creighton University School of Medicine: "What chance has a principle of education to compete with a principle of humanity or service in an organization where both of its principles are supposed to coordinate?" In a school of nursing all should subserve the education of the student. In a hospital all should subserve the welfare of the sick. It is inevitable that instances will arise in hospital wards where student nurses are receiving their training in which they must make a decision in the favor of one principle and to the detriment of the other.

Is it fair to a student nurse to compel her to give nursing service to a patient when her presence is demanded in the classroom? Is it fair to the patient to deprive him of that very necessary and adequate nursing care which the hospital has been pledged to give him, in order to allow a nurse to attend a class? The answer is obvious. How, then, are we to overcome this difficulty? Frankly, it seems to me that there is only one method, which is by the separation of nursing schools and hospitals, as it is evident that they are fundamentally incompatible. and by the establishment of training schools for nurses in close cooperation with and under the supervision of, in fact a very part of, a state university or college. Higher standards of admission, the requirement of a cultural background, and the necessity for more liberal education are forcing this separation between

hospital and schools as hospitals are finding that they are not equipped to supply this additional education. The university or college school of nursing must be established on one principle and one principle only—the education of the student nurse. This immediately raises the question, what education does the student nurse require?

In university schools it is generally considered that a nurse's training is a part of the liberal arts course and courses are arranged usually so that an A. B. degree in nursing may be conferred. A course of this nature usually extends over a period of five years, consisting roughly of six semesters of academic and theoretical work and twenty-four to thirty months of clinical nursing. Obviously a student graduating from a school of this nature has obtained, besides her nursing training, a liberal education. It is rather impractical to impose this type of nurses' training upon the average hospital. It seems to be the opinion of certain nurse educators that a student should have or obtain a certain amount of cultural background, but is it the duty or function of a hospital school of nursing to supply this liberal education? Would it not be more practical to demand that the student nurse obtain this portion of her education before entering the school of nursing? With this portion of her education completed prior to admission to a hospital school of nursing, her every effort would be devoted to the strictly professional work of nursing, *i. e.*, clinical nursing.

A commission known as the Commission on the Grading of Nursing Schools has been appointed to study entrance requirements, curricula, and pertinent facts of nursing education, nursing service, etc. This commission has done remarkable work, but its task probably will not be completed until 1931, or even later. Its studies have revealed that the supply of nurses is greater than the demand for them and that nurses are being graduated faster than they can be absorbed. There are approximately 2,300 schools of nursing in the country graduating about 20,000 nurses yearly, 3,500 of whom have not had more than one year of high school education. A study of the entrance requirements of these 2,300 schools reveals a wide diversification. There has been a tendency in recent years to raise entrance requirements, and today there are some schools that require preliminary education equivalent to requirements for university admission. This movement is entirely justifiable and is very commendatory, if it is always borne in mind that the entrance requirements should be sufficient, and the curricula of such a nature as to qualify a nurse as an assistant to the physician and not a competitor.

Just what effect the separation of school and hospital would have is conjectural at present as we do not have sufficient tabulated facts to draw definite conclusions. It certainly would mean the withdrawal of many student nurses from hospital ward work and the placing of a major part of

the nursing service in the hands of graduate nurses. As a result of this, a greater demand for graduate nurses would be created, which in turn would relieve the present situation of over-supply. Separation of school and hospital would result in the direct reduction of the number of nurses' training schools, which probably would decrease the supply of graduate nurses. The substitution of graduate nursing service for student nursing service is looked upon by many hospital administrators as disastrous to the hospital on the presumption that student nurses are an asset to the hospital. The question as to whether or not graduate service is cheaper than student service has received considerable attention from both the nursing and hospital field. Unfortunately, we are unable at the present time to decide this question definitely. We have attempted to decide it at our Indiana University hospitals. Consideration of our incomplete figures tend to show that graduate service would not be much more expensive than undergraduate nursing service providing that undergraduates pay a tuition fee. I believe that it is generally considered that graduate nursing service is superior to undergraduate and probably that the superior service rendered would repay an institution for the additional financial outlay. From the standpoint of education it appears to me that the use of graduate nurses would be a very good policy, especially if the institution were affiliated with a state or college of nursing and the graduate nursing service used for supervision of routine clinical nursing instruction.

The tendency in establishing a state university or college school of nursing is to place it on a parity with other divisions of college or university education such as the School of Liberal Arts, the School of Commerce, the School of Law, the School of Medicine, etc., with a dean, a faculty, and a curriculum of its own, responsible to the Board of Trustees or Regents and not under the supervision of the dean or medical council of the School of Medicine. This, it appears to me, is basically unsound, as schools established in this manner, probably will have a tendency to make its graduates not assistants to physicians but rather their competitors. I believe that the Dean of the Nursing School should be responsible to and under the supervision of the School of Medicine.

The dean of such a school should be interested primarily in education. Most of the modern schools of nursing have at their head a person with a dual function who is responsible for the education of the nurses in training and is responsible for the adequate nursing care of patients in that hospital of which the school is a part. It is exceedingly difficult to find directors of nurses' training schools who are capable of assuming both these responsibilities. Probably nurses would receive better education and patients better care if these responsibilities were in the hands of two individuals—one responsible for education and the other

for nursing care. At least the problem of the hospital administrator would be simplified a great deal.

The faculty of such a school should consist of two groups: one—a group composed of full-time nurse educators or instructors teaching the purely nursing subjects; the other group consisting of members of other faculties teaching their specialties modified to conform to the requirements of a nurse. It is not my intention to discuss the curriculum of the school of nursing except to say that it has been suggested that the arrangement of a course of such a school follow the arrangement of the courses of a medical school—the first year devoted to theoretical subjects, the second year to clinical bedside instruction in nursing care, followed by a period of hospital training somewhat similar to that of an internship.

To summarize: The tendency in modern nursing education seems to be to increase the liberal education and cultural background of nurses; second, to reduce the number of graduates and to improve their training; third, to increase the demand for graduate nurses; fourth, to separate nursing schools and hospitals; fifth, to establish autonomous nursing schools under state university or college supervision.

DIPHTHERIA CONTINUES IN CERTAIN COMMUNITIES

The diphtheria deaths for the month of March show a gratifying decrease. There have been only five deaths during the entire month in contrast to nineteen for February and eighteen for January. It is to be expected that the rate should fall at this time of the year. Most significant is the fact that each of the five counties suffering a death in the month of March already have been on the list as published from month to month for the year 1930. Knox county needs particularly to be warned inasmuch as it has had a death each month during 1930. Elkhart, Monroe and Tipton counties each have had two deaths so far this year. Inasmuch as all are rather small counties their rates are bound to be high for the year 1930 unless they take immediate action to prevent the further progress of the disease. Marion county with a single death is approximately at the level for the average of the state.

The profession must not take too much satisfaction in the lower rate for the month of March inasmuch as diphtheria deaths always decline at this time of year. The months immediately following should show practically no deaths if we are to attain the low rate that was reached last year. Below is given a tabulation of the deaths by counties for the same in 1930. It is hoped

that the people of each county will make a very strenuous effort to keep their county off the list.

| TOTAL DEATHS | | | TOTAL DEATHS | | |
|----------------|---------|--------|----------------|---------|--------|
| COUNTY | SO FAR | MARCH, | COUNTY | SO FAR | MARCH, |
| | IN 1930 | 1930 | | IN 1930 | 1930 |
| Allen | 1 | 0 | Monroe | 2 | 1 |
| Clark | 1 | 0 | Montgomery ... | 1 | 0 |
| Clinton | 1 | 0 | Morgan | 1 | 0 |
| Delaware | 2 | 0 | Perry | 1 | 0 |
| Dubois | 1 | 0 | Randolph | 1 | 0 |
| Elkhart | 2 | 1 | Tipton | 2 | 1 |
| Greene | 1 | 0 | Vanderburgh .. | 3 | 0 |
| Howard | 1 | 0 | Vigo | 1 | 0 |
| Jay | 1 | 0 | Warrick | 1 | 0 |
| Knox | 3 | 1 | Wayne | 1 | 0 |
| Lake | 3 | 0 | White | 1 | 0 |
| Lawrence | 1 | 0 | | — | — |
| Marion | 9 | 1 | | 42 | 5 |

The *Illinois Health Quarterly* for January-March of this year contains a very interesting article entitled "Ten Years' Experience with Toxin-Antitoxin." This article was written by John D. Nichols, M.D., Director of Health, Mooseheart. Almost everyone is familiar with the Mooseheart Home for Children. In an institution of this size (twelve to fourteen hundred population), diphtheria constitutes a very considerable menace. In the ten years covered by this article, there have been but three cases of the disease, while for several years prior to 1919 diphtheria had been almost constantly present—at times epidemic. Quarantine and prophylactic doses of antitoxin had failed to prevent the disease. During September, 1919, the entire student body was immunized with toxin-antitoxin and since that time every child has been immunized immediately after admission.

The three cases of diphtheria since 1919 are as follows: One was a boy who was overlooked and not immunized. A second was in the case of "a boy with large tonsils who had been immunized less than a month previously." The third case was that of a boy four and one-half years old who had been immunized three years previously and who died of laryngeal diphtheria in 1927. "Large doses of antitoxin, intubation and tracheotomy were of no avail." It is rather evident that this last case was one of those persons who are excessively subject to diphtheria, probably being unable to produce antitoxin for themselves.

The author concludes that the method of immunizing against diphtheria by the administration of toxin-antitoxin has been of the very greatest value to the institution and has succeeded when all other methods have failed. Every child was given toxin-antitoxin without having had a preliminary Schick test. One series of toxin-antitoxin has been sufficient practically to eliminate diphtheria from the institution.

T. B. R.

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EDITORIALS

OMENTAL MIGRATION

Abdominal surgeons long have been aware of the behavior of the omentum in the presence of infection and perforative lesions of various abdominal organs. The migration of this structure to the danger zones within the abdominal cavity is an amazing performance. Without its protective action abdominal lesions would be associated with much higher mortality rates than now prevail.

While most of the natural phenomena brought into action as the result of disease lie in the invisible domain of chemistry, we have in the action of the omentum a beautiful and grossly visible mechanism whereby nature attempts to conserve life. However, it is one thing to observe a given phenomenon and quite another to explain how it occurs. Different theories have been proposed to explain the movements of the omentum to abdominal danger zones, but none of them have been entirely satisfactory. Schutz (in the current issue of *Surgery, Gynecology and Obstetrics*) has offered an ingenious theory which at least has the merit of simplicity, a merit which is often of great service in explaining the mysterious. He views the omentum as a trellis of blood vessels, between two peritoneal surfaces and supporting loose areolar and connective tissue and fat. The arrangement of the blood vessels constitutes the important fact upon which the theory is based. Coursing along the upper border of the omentum transversely across the abdominal cavity is the large gastro-epiploic artery. Arising from this, six to eight fair-sized parallel branches course at right angles to the gastro-epiploic artery, down to the margins of the omentum. With this omental anatomy in mind, the first step in migration is an increased arterial blood supply, initiated probably by the well-known phenomena associated with inflammation. This increase in arterial blood supply involves all the vessels of the omentum. The tension within the omental vessels increases to the point where these vessels tend to straighten out in the direction of the blood flow, or toward the periphery of the omentum. This movement is well illustrated by the action of a coiled garden hose when water is turned on. As a result of this straightening out of the blood vessels the omentum is carried along in a mass movement, and

soon comes in contact with the focus of infection. From this point the action of the omentum is controlled by the ordinary pathologic changes associated with inflammation.

THE MISTAKE OF APPLYING IODINE TO WOUNDS

For many years every lay person, and quite recently every boy scout and every girl scout, has considered that the proper treatment of all wounds consisted in the application of pure tincture of iodine, and more recently the application of mercurochrome. That this practice may prove to be objectionable and sometimes serious has been pointed out by numerous observers, but the application of iodine and mercurochrome to wounds still continues among lay persons, and even many physicians are guilty of the practice. In reality, some of the irritations and actual burns produced by such treatment are far more significant than the wounds themselves. Sometimes these first aid measures result in denudation, the formation of blebs, and an increase in infection as evidenced by edema and lymphangitis that can be traced to the misplaced effort to sterilize the wound. Perhaps the most striking example of the serious results that may follow first-aid treatment, and significant because of the prominence of the patient, was the tragic ending of President Coolidge's son, who had a blister on the heel which received first-aid treatment by a liberal application of tincture of iodine, a treatment that it is thought by many aided in the development of infection and the fatal ending.

As pointed out by Heisel in his president's address before the Cincinnati Academy of Medicine (*The Journal of Medicine*, Cincinnati, August, 1929), our watchword should be drainage, which is the all-important principle in the treatment of wounds, both as to prophylaxis and cure. Antiseptics when applied to a raw surface often give rise to irritation. In some instances they do more damage than good by devitalizing cells, thus encouraging rather than inhibiting bacterial growth. This would not be so bad with the wound surface allowed to remain moist to rid itself of a toxic element, but feeling secure in the idea that the wound has been sterilized a dry dressing is applied or none at all. Sometimes an antiseptic dressing powder is used. When we realize that repair is accomplished by physiological normal cells and body fluids, it is perfectly evident that we should favor the free flow of these elements to, through and out of the wound. Thus the wound is flushed of deleterious substances, the zymotic action of the body fluid digests loose devitalized particles, and soon repair is established. The reverse of this results when the wound surface is allowed to dry and scab. Leucocytes pile up in all the adjoining lymph spaces; toxic fluids accumulate, hinder and even destroy the cells which should be performing

their zymotic function. The resultant tension in the area involved interferes with the free flow of blood, and the entire field now becomes an ideal habitat for germ life.

To minimize the danger of infection to practically nil, and to establish conditions most favorable to wound repair, Heisel says that it is not necessary to use undue effort at mechanical cleansing, nor is it necessary to apply strong antiseptics. Except where cosmetic effects are of prime importance, a doubtful wound or one not made under surgically clean conditions, should not be closed too tightly, or not at all unless it be very extensive. An application of some mildly antiseptic ointment of rather heavy consistency, so that it is not absorbed in the dressing, should be laid on thickly, and this in turn covered with an ample gauze dressing. This allows free escape of wound secretions which find their way from under the ointment into the gauze dressing, about its edges. The dressings never stick to the wound, and the patient usually remarks about the freedom from pain. In wounds already infected, the scab and a necessary number of sutures are removed. The walls are separated where indicated, and the same type of dressing is applied as before, laying the ointment into the wound. If there is much edema, abundant hot compresses are applied without removing the under dressing. Tetanus antitoxin should be administered when indicated. Heisel says that in one of Cincinnati's largest packing plants where knife wounds, burns and scratches are common occurrences, and where the nature of the industry is decidedly conducive to infection, there has not been a single infected wound since 1920 at which time the first-aid man was instructed in this method. Several bad infections occurred in men who refused treatment. One of these cases proved fatal.

HOSPITAL MANAGEMENT

Too often the management of hospitals is entrusted to persons who have no business ability or system. Hospitals under religious control frequently have on the Board of Directors a lot of broken down or antiquated preachers without business training or executive ability, and they in turn use very poor judgment in the selection of hospital superintendents and others upon whom the real management of hospitals falls. In the selection of a staff there also is a very decided tendency to use no discrimination, but to pick out physicians through church or other influence, irrespective of ability or ethical standing. Is it any wonder that these hospitals are obliged to call frequently upon church people for donations to make up hospital deficits, and that great difficulty is encountered in securing approval from organizations that pass upon the efficiency and ethics of hospitals and rate them accordingly?

If a hospital is to attain its greatest field of

usefulness, it must be established and run along right principles. It is all right to have the hospital control under a board of directors or trustees largely or wholly made up of laymen, but those laymen should be prominent and influential in the community, as well as known to appreciate the essentially high moral and professional tone needed in a modern hospital. This board of control also should appreciate the importance of leaving to a wisely selected medical staff the professional activities of the institution. The staff should be composed of physicians who not only are graduates of acceptable medical schools, but have been selected because of their high moral and professional standing. As has been pointed out by Caldwell, secretary of the Council on Medical Education and Hospitals of the American Medical Association, "the staff should be selected discriminately and not promiscuously. Such a selection of a hospital personnel marks a distinction between the hospital conducted in the highest interests of its patients, and the one conducted solely for profit. It is the duty of the Board of Trustees to see that no other than properly qualified physicians are permitted to see patients in the institution. This question has been recognized by the courts, and in the refusal or dropping of a physician from a hospital staff, when followed by legal procedure, the board of directors invariably has been upheld. Fallacy, quackery and cultism never have found their way into the standardized hospital, which stands as a center of sound medical practice, free from the numerous cults or fads which are of doubtful value even if they are not actually dangerous."

SO-CALLED MIRACULOUS CURES

The newspapers and monthly lay magazines recently have contained much information concerning the miraculous cures that have occurred at Malden where thousands night and day had been kneeling at the grave of Father Patrick J. Power. Newspaper publicity started the thing, and newspaper publicity plus blind faith in the possibilities of participating in a miracle has kept the thing going. Discussing the subject in *The Nation*, Gardner Jackson says: "The commercialism involved is ghastly. The slab over the grave is covered with money dropped by the kneelers. The two wastebaskets filled with money and emptied two and three times a day. The mountainous pile of scarcely burned ritual candles in the rear of the cemetery chapel which are removed to make room for other candles by three shifts of boys, working day and night, just as soon as the people praying by them and making a contribution of anything from ten cents up for each candle have left the chapel, a flat violation of the religious theory of the vigil light. The hordes and hordes of crippled children yowling at the treatment forced upon them. The tragically ignorant and

faithful mothers with typical Mongolian idiot children whom they place upon the muddy, soiled, slab to cure idiocy. The newspaper men rushing from the crowd collected around a reported cure to another crowd, taking names and rushing off to the telephone across the street. The sergeant and patrolman at the grave, trying to keep the kneelers moving, helping them up from kissing the stone, and in the case of the sergeant, treating them just like a football crowd, even to telling one woman to 'get the hell out of here; you have been here nineteen times already.' Tracing the origin of the present appalling flocking of pilgrims, Jackson says that one instantly realizes that it would not and could not have happened except for the newspapers, and then he goes into detail as to just how the thing really did happen. In short, representatives of the lay press started the thing and representatives of the lay press are keeping it up.

An analysis of some of the so-called miraculous cures indicates that in every instance there was an emotional gesture that offset a plain case of hysteria, or broke up a habit of invalidism. What has occurred at Malden has occurred at the various shrines in Europe; the miraculous cures occur in those who have no pathology or honest-to-goodness abnormality that can be relieved or cured by anything short of faith in Divine intervention. Physicians know that hysteria and the habit of invalidism has many victims, and every well-trained physician with an extended experience and an impressive personality, has accomplished just as miraculous cures through suggestive therapeutics as have been accomplished at Malden or any shrine, but seldom if ever do they make capital of it, and if heralded far and wide by the lay press it is quite possible that the physician responsible for the cures of hysterical conditions or imaginary ailments would soon be acclaimed as a divine healer. The truth of the matter is that success in the practice of medicine does require, consciously or unconsciously, some attention to the psychology of the condition presented, and success or failure oftentimes depends upon the amount of attention given to the psychology of the illness, irrespective of attention to pathologic processes the cure of which may require consideration of mental processes as well as removal of the pathology. The occurrences at Malden should make us sit up and take notice of some factors in connection with the relief of alleged illness or deformity which heretofore we have neglected.

ADVERTISING BY THE PROFESSION

The Chicago Medical Society is contemplating an advertising campaign, to offset the distorted views concerning the aims and ideals of the medical profession as presented by the average newspaper editor. As a suggested start it is proposed that the oath of Hippocrates be reproduced in a

full-page advertisement in the Saturday afternoon and Sunday morning papers of one week. The next week the advertisement will contain a brief history of organized medicine in general. In another week the Code of Ethics of the American Medical Association will be printed so that the public will have the opportunity to read that classic document and learn the truth about it. Later an advertisement enumerating the services given free by the medical profession in the city of Chicago and the fee table of the Chicago Medical Society will be given in full, with the qualifying statement that the members are ready and willing to care for the sick all of the time regardless of financial condition. The next advertisement should contain an exposition of the money value of the services rendered by the medical profession without remuneration, based on the minimum fees of the fee table or a fraction thereof. In still another advertisement it could be admitted that the experience gained by caring for the sick paupers is of great benefit to the medical profession, but that the people able to pay for medical services are the ultimate beneficiaries through the increased ability and experience of physicians. If the medical profession is not to be pauperized, those who can pay must bear the burden of the free medical service rendered, either by paying higher fees than they otherwise would have to pay, or by paying the physicians and surgeons for the services now donated. Further advertising should educate the public as to the truth about preventive medicine, dietetics, hygiene, and sanitation. Such a presentation of incontrovertible facts would serve to enlighten the general community as to the aims and ideals of the medical profession. It would for the first time enable the public to know the unbiased truth regarding its most valuable community asset, the ability of the capable medical profession to care for the health needs of the individual. However, it is admitted that no matter how truthful the copywriter, such articles if presented as free news notes or feature articles will be cut and garbled almost beyond recognition unless issued by those having the proper contacts or by the professional publicity men who also know better than the medical profession what the public will read, what is news, and what will be published widely by the press. In paid advertising the medical profession can tell the people what we believe they should know without having to defer to the city editor, without having to disguise items that are no longer new so that they may be treated as news. Finally, paid advertising makes it easier to get trustworthy free publicity.

This is a formidable program, but it offers promise of excellent results. If carried out by an organization and on a high plane, with no exploitation of individuals or groups, no serious objection can be offered.

CHRISTIAN SCIENCE CENSORSHIP

Dr. Maurice Fishbein, editor of *The Journal of A. M. A.*, addressed the Kirshbaum Open Forum at Indianapolis January 12th on the subject, "Mental Dynamite." In the address Doctor Fishbein rapidly sketched the historical background of mental healing which led up to its logical culmination in the founding of Christian Science by Mary Baker Eddy, or, to be more exact, Mary Baker Glover Patterson Eddy. He was careful to state that all the facts presented regarding the amazing history of this remarkable woman and the organization which she founded had been documented carefully and were, therefore, authentic.

The principal facts presented were as follows: Mrs. Eddy appropriated her system of healing from the work of Doctor Quimby, a New England healer with whom she was associated for a time and by whom she was supposed to have been cured. She was from childhood a neurotic and emotionally unbalanced individual from the effects of which condition she suffered all her life. That, regardless of her claim that her system was largely theological, the fact remains that the claims of commercialism were never far in the background. That criticism of Mrs. Eddy or her church must be suppressed rigidly, and prevented from public circulation through the press or by unauthorized books or public addresses.

That the attempt to censor criticism of Mrs. Eddy is no idle gesture the experience of Doctor Fishbein in Indianapolis amply proved. The Kirshbaum organization originally had announced the subject of the lecture as "The Dynamite in Mental Healing." They were approached immediately by a representative of the Christian Science organization who demanded that the subject be changed. This was done (a cowardly act), and the local announcements carried the subject, "The Prolongation of Life." When Doctor Fishbein was informed of this change he promptly insisted on the original subject. Subsequent announcements gave his subject as "Mental Dynamite." And it is probably no accident that newspaper accounts of the lecture made no mention of Mary Baker Glover Patterson Eddy or the Christian Science church, although the principal part of the address was concerned with her and her church.

Doctor Fishbein is performing a valuable educational service in giving the public authentic facts relative to Mrs. Eddy and her church—all the more valuable for the reason that what he has to say could not be circulated through the ordinary channels of newspapers. The censorship which this small group of Christian Scientists has imposed on all matters of adverse criticism is well-nigh unbelievable. It is unthinkable that an organization that has to maintain itself by a rigid suppression of all facts pertaining to its history can long survive. The intimidation of newspapers

and book shops, which the organization never has hesitated to do and for which machinery in the church is specifically formed, will not indefinitely keep the public from informing itself of the facts.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely free to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve you.

MANY people talk glibly about the enormous bills paid to physicians and hospitals for medical and surgical services and attention, but we feel sure that if some of these extravagant tales were investigated, little would be found to substantiate them. In fact, one of several actual experiences with people who talk in big figures about what they spend for taking care of their ailments leads us to believe the old saying that some are liars and others are d— liars.

THE Indiana county medical society secretaries held their midyear meeting at the A. M. A. office in Chicago on April 23rd. It was a very instructive meeting inasmuch as it proved an eye-opener to many physicians who had but a vague idea as to the amount, scope and character of the work done at the A. M. A. office in Chicago in the interest of everything that pertains to improved health conditions for humanity and the making of better and more efficient physicians. The story of the meeting is told elsewhere in this number by the executive secretary.

THE American College of Surgeons is asking for donations to increase its endowment. Some of its activities include hospital standardization, clinical research, and the betterment of surgery and traumatic surgery in particular. The College places its stamp of approval upon men who are thought to be not only well trained and thoroughly competent but who follow a very high ethical standard. If the American College of Surgeons would turn over a new leaf and live up to its principles and teachings we have an idea that the organization would command far wider respect and support.

THE American Birth Control League of New York City may be interested in knowing that it has a defender in the form of the editor of *Clinical Medicine and Surgery* of Chicago, who recom-

mends that interested physicians should write to the League for its publications. We have no objection to the dissemination of birth control knowledge among members of the medical profession, but we do object to the indiscriminate dissemination of such knowledge to lay persons, and if some of our New York medical friends can be believed, then the American Birth Control League is guilty of some methods of disseminating birth control knowledge that cannot be approved by us or anyone else knowing the facts.

THE people would be better off and have a greater appreciation of public health measures if knowledge concerning the spread of contagious and communicable diseases were not so carefully guarded. If smallpox develops in a city the merchants, who of course are big advertisers in the newspapers, through their influence prevent newspaper spread of the knowledge as to the number of cases that exist. This is not conducive to the checking of any epidemic which might be controlled promptly by the health authorities with cooperation on the part of an enlightened public. Some people have to be alarmed before they will take the very necessary precautions to protect themselves or others.

SOME of the newspapers carry the announcement that the Mayo Brothers have dedicated a fortune estimated at thirteen million dollars to humanity's service, through the Mayo Foundation of Medical Education and Research, affiliated with the University of Minnesota, the aim and object being to train physicians and surgeons for the future. At the present time some three hundred physicians are being especially trained through the advantages offered by the Mayo Foundations, and there is a waiting list of over 1,400. In other words, the Mayo brothers have started out to make better doctors by offering advantages that are not offered by any state. It is a commendable enterprise and does credit to two of the foremost surgeons of the world.

DURING the past seven years five hundred thousand children in Ohio are on record as having received a series of three immunizing injections as a preventive of diphtheria, and the health department of the state has no record of a single death from diphtheria among those who have had the complete course of toxin-antitoxin during that time and who afterwards showed the Schick test negative. Immunization long since has passed from the experimental stage. Its enormous value in the prevention of diphtheria can be disputed no longer. One of the things we should do here in Indiana is to bring about more education concerning immunization against diphtheria, and there is no reason why the members of the Indiana State Medical Association should not sponsor a

movement to give every child under ten years of age in the state the immunization treatment at such a flat rate as that being offered in the City of Chicago by the members of the Chicago Medical Society.

E. G. COLLINS writes to the *British Medical Journal* (September 28, 1929) as follows: "Some time ago I was called out to see an old lady, seventy-six years of age, who was running an evening temperature with a fast pulse. Bacteriological and clinical evidence had shown this to be due to infected tonsils. Under gas-oxygen anesthesia we removed her tonsils by the dissection-guillotine method. She made an uninterrupted recovery and was sitting up out of bed in three days. While one will admit readily that the operation is not feasible in every case of septic tonsils in old people, this case illustrates that age in itself is not necessarily a contraindication for tonsillectomy. By a coincidence I removed her great grandson's tonsils and adenoids on the same day."

EVERY member of the Association must remember that this year's session will be held in Fort Wayne the last week in September and will start off with a scientific program at 1:00 p. m. on Wednesday. In other words the program is advanced by a half day as compared to preceding years, and there will be no scientific meetings on Friday as that forenoon has been reserved for the meetings of the House of Delegates, the Council, and for the golf tournament. On Wednesday night there will be a dinner meeting of the House of Delegates, and later there will be a smoker for all members in attendance, or perhaps a theater party to which members, their wives and sweethearts will be guests of the Fort Wayne Medical Society. Thursday noon will be devoted to fraternity and class luncheons, and Thursday night will be taken up by either a banquet or public meeting as the local committee on arrangements may decide.

THE medical profession of Ohio is very subservient when it tolerates, without question, the findings of the Industrial Commission of Ohio, which it seems to us operates under arbitrary, inconsistent and unfair rules in awarding fees to physicians in compensation cases. Those Indiana physicians who live near the Ohio line and occasionally are called upon to treat industrial cases and later find that compensation must come through an award by the Industrial Commission of Ohio, no doubt are forced to take their medicine when perfectly reasonable and fair fees are cut down from fifty to seventy-five percent, but they can protect themselves to some extent by refusing to give attention to cases coming from Ohio unless someone other than the Industrial

Commission of Ohio becomes responsible for decent compensation. Our attention has been called specifically to several instances where awards did not conform to either reason or fairness, though in all probability an inflexible rule was followed. But why such rules?

Two competent physicians residing in the same town and each having a fairly large practice, for several reasons hate each other very cordially. Finally, Dr. A. told a patient that a rotten job of surgery had been done at the hands of Dr. B. Result: a suit for malpractice against Dr. B. and demand for ten thousand dollars damages. In retaliation, Dr. B., whose reputation was threatened through the malpractice suit, found occasion to tell a patient that a rotten surgical job had been done by Dr. A. Result: a malpractice suit against Dr. A. Two malpractice suits that injured two physicians and created a bad impression in the minds of the laity. Will physicians ever learn to bury their jealousies and petty enmities for each other and show some spirit of tolerance and charity? The president of one of the large indemnity companies issuing insurance carriage for physicians says that in practically every case of malpractice that his company has been called upon to defend for a client, a jealous and envious or quarrelsome doctor was at the back of it. What a fine reputation for brotherly love we seem to have!

THE Indiana State Medical Association office has sent a letter to county medical society secretaries calling attention to films supplied by various commercial firms for use at county and district society meetings. A list of films and speakers has been obtained by the Association, and the list may be secured by writing the executive office, but it should be understood that the Indiana State Medical Association does not recommend or approve any of these films or speakers. The suggestion is offered that those societies that are considering the advisability of using any of the films should obtain definite information concerning the character of the films. Some of the films are instructive and interesting and are well worth presentation before medical groups, whereas others are not so desirable because they represent objectionable advertising propaganda.

At first thought it may seem a matter of small moment to medical men whether the general public is informed with regard to the advances of medical science or not, but we believe it is of more consequence than generally is believed by physicians, for the more intelligent people come to know of the splendid achievements of modern medicine and surgery, the less likely it is that they will waste their money on quacks and imposters.

The semiquack method of inviting reporters to medical events for the purpose of exploiting the selfish interests of schools and individuals should receive the severest condemnation from reputable medical men, who, if they would, could act to some purpose through medical societies.

It would seem worthy of the consideration of those in charge of reliable daily papers, of which, fortunately, there still remain a number, that they employ an honorable, conscientious physician to look over the material pertaining to medicine which is submitted for publication, and to furnish occasional news notes and editorials on suitable subjects of general interest.—*Pennsylvania Medical Journal*, December, 1929.

As we have said in previous numbers of THE JOURNAL, many people are getting thoroughly disgusted with the rank commercialism that prevails in the radio field in connection with broadcasting. One gets sick and tired of hearing extravagant praise concerning the virtues of all sorts of worthless or near worthless merchandise and proprietary medicines, or endorsement of pseudo-medical cults. In fact, much of the stuff that is broadcasted today is pure bunk and there ought to be some way of preventing broadcasting stations from imposing upon the public. It is possible to determine whether programs are serving the public interest, convenience or necessity, and upon that basis the license should be granted. It is to the Federal Radio Commission that the public must look for protection and, as the *Journal of the A. M. A.* (April 12, 1930) well says, "If the Federal Radio Commission desires to merit public confidence it must find some way to curb this type of broadcasting." On the other hand, if broadcasters desire to retain public respect they must assure the public that the average home will be protected against an objectionable and obnoxious type of promotion such as we encounter regularly when "tuning in."

WHEN we said that vaccines are about a "fifty-fifty shot", we did not mean that vaccines are a failure as charged by one of the readers of THE JOURNAL. We have no fault to find with anyone who gives vaccines, in fact we often use vaccines, but we do not believe in blindly following the recommendations of some men that vaccines always are a cure or even beneficial. In connection with this subject we have been furnished with a clipping from an editorial in *Clinical Medicine and Surgery* for November which says, "Those who fail to use a remedy because it sometimes fails to work are doing their patients and themselves an injustice, and those who base adverse opinions on unstudied failures have wholly missed the essentials of the scientific viewpoint. Vaccines, judiciously administered, in connection with well-considered advice, do help materially in pre-

venting colds and other respiratory affections, as proved to the satisfaction of thousands of physicians, and they are worthy of sincere trial by every medical man who aspires to keep his patients well and happy."

The trouble with the giving of vaccines, as we see it, is that they are prescribed so indiscriminately and apparently without rhyme or reason.

THE few copies of the publication known as *Liberty* which we have inspected, figuratively speaking, have left a bad taste in the mouth because of the advertising. Reputable publications usually reject questionable medical advertising, but it is very evident that *Liberty* is not especially particular as to the character of medical copy accepted for publication in either the reading or advertising pages. Recently *Liberty* carried an article by a woman writer in which, apparently, attempt is made to show that the code of ethics is in the interest of the physician and opposed to the welfare of the public. As the *Journal of the A. M. A.* well says, "every physician who read the article in *Liberty* finds it, to say the least, ridiculous in its disorganization, lack of logic and its distorted reasoning. The pity of it is that *Liberty* inspires some of its readers, through the mass impression of the presentation, to look with suspicion on scientific medical care." It is unfortunate that a periodical claiming a large circulation has loaned its pages for such a diatribe, and apparently made no effort to secure accurate information. It is hard to understand how a periodical designed to have the confidence and respect of the reading public can expect to build up a worthwhile circulation when guilty of circulating such untrustworthy information.

Two fairy stories that would be good if we thought they were true:

A prosperous looking man walked into a Cincinnati physician's office and said, "Doc, you don't remember me, do you? You operated upon me over twenty years ago and I skipped out without paying my bill which I want to pay now." Thereupon the prosperous looking gentleman handed the physician a check, which to the astonishment of the physician was for ten thousand dollars, and later the check proved to be good!

An incident occurring in Pennsylvania was reported in which a physician was notified by an attorney in the west that he was heir to an estate amounting to nearly a half million dollars. Inquiry resulted in discovering that a bachelor with no heirs and who had accumulated a fortune in Alaska decided to pay a long neglected medical bill and therefore he had made the physician the beneficiary in a will which subsequently was executed in favor of the physician.

Ye gods! We never supposed physicians ever ran up against Santa Clauses of that kind. How-

ever, remembering the hundreds of guys who have failed to pay us for professional services rendered, and some of whom have since become rich, we feel that we ought to renew faith in our childish belief in a Santa Claus. Up to date, the best we have been able to do is to secure a chicken or a bunch of flowers now and then from a grateful patient. Within recent years chickens have reached such dizzy heights in price that grateful patients do not seem to think that they can stand the drain incurred by volunteer efforts toward relieving their consciences of obligations. If we had any such experience as that related in either fairy story we would die of heart failure, so it is best to struggle on and stifle any hope.

IN this day of depression the physician suffers more from inability to secure monetary returns for his work than he does during ordinary times when it is bad enough at best as a direct result of the business expansion brought about through the unwise extension of credit. Installment buying now is encouraged, and in consequence the working man as well as the man in moderate circumstances belonging to the so-called middle class, has nothing left at the end of the month when his installment obligations are paid. Of course the automobile, the electric sewing machine, the radio, the furniture, and even the clothes are mortgaged until entirely paid for, but the physician cannot be secured in that way, though perhaps he would be better off if he arranged with many of his patrons to accept partial payment of an account and secure the whole as much as possible by notes similar to those given in the purchase of the automobile or radio purchased on the installment plan. This may seem like a hard-boiled policy, and yet considering the general habit of most people to pay the physician last, and oftentimes not at all, offers ample reason for considering the matter of compensation for the physician as a purely business proposition. No one is going to want for good professional care, and reputable physicians always have and always will make the fees consistent with the ability of the patient to pay, but the medical profession and public must get away from this idea that the average citizen can mortgage his entire income in paying for luxuries and totally ignore bills for such necessary service as that rendered by the physician.

THE Indiana State Medical Association, in connection with health officers, has inaugurated a diphtheria campaign with the idea of ridding Indiana of a preventable disease which now takes so many lives among children and young adults. It is very unfortunate that there has not been a more hearty response from physicians to the call, and more cooperation on the part of the public. It really is pathetic to note that here and there

some ignorant and opinionated physician stands out in his particular community as an objector, on the false ground that toxin-antitoxin is not a preventive, and that antitoxin is not a curative agent. Antitoxin is a marvelous specific for diphtheria, but prevention always is better than cure, and it has been discovered and proved that a child can be protected against diphtheria, probably for life, by subcutaneous injections of toxin-antitoxin. In New York state over 600,000 children have been given toxin-antitoxin. The procedure has proved itself safe, and as the Bulletin of the New York State Board of Health says, "It is very seldom that children under ten notice any after effects at all, while among those under five such effects are almost unheard of. Only three injections, a week apart, are usually necessary. The protection develops slowly and may take months before it is complete. The Schick test is used only for the purpose of determining whether or not a person is protected against diphtheria."

Diphtheria can and should be abolished in Indiana. The movement, sponsored by the Indiana State Medical Association, will bear results, but the best results will depend upon the amount of cooperation obtained. Every Indiana physician should put his shoulder to the wheel and push the enterprise with all his might.

FOR many years we have been saying kind words concerning the work of the Council on Pharmacy and Chemistry of the A. M. A. and usually included some comment concerning work being done in disseminating information concerning quackery and allied subjects. The latter should be credited to the Bureau of Investigation, of which Arthur J. Cramp, M.D., is the very active and proficient director. In fact, the A. M. A. is engaged in so many activities that it requires a number of departments or bureaus to carry on the colossal work of the Association. Some of the things which the American Medical Association is doing may be enumerated as follows:

It is advancing the interests of scientific medicine in the United States.

It publishes the leading medical journal of the United States.

It publishes for the laity a health magazine, *Hygeia*, containing a fund of authentic health counsel.

Its Council on Pharmacy and Chemistry investigates and reports on medicines used by physicians.

Its Chemical Laboratory makes original investigations and also analyzes nostrums.

Its Council on Medical Education and Hospitals furnishes information on medical colleges, medical education and licensure and hospitals, and inspects medical colleges and hospitals.

Its Bureau of Investigation collects and disseminates information on the nostrum evil, quackery

and allied subjects.

Its Bureau of Health and Public Instruction seeks to promote the health education of the public.

Its Bureau of Legal Medicine and Legislation keeps in touch with legislative activities of interest to the medical profession so as to safeguard the physician's interests.

Its Council on Physical Therapy investigates and reports on physical devices used in diagnosis and treatment.

In the March number of *THE JOURNAL*, in the department devoted to the Indiana University School of Medicine, we published an article by R. N. Harger, associate professor of biochemistry and toxicology in the Indiana University School of Medicine, on the subject, "What Is the Poison in Poison Liquor?" Aside from the fact that the *Literary Digest* published a comprehensive abstract of the article, we have received numerous letters from prohibition advocates asking for copies of *THE JOURNAL* containing the article, and in one instance we have been asked if we will give our permission for the publication of reprints for general distribution. Just what comfort "the drys" can get from the article is a little difficult to understand, for an analysis of the article shows that the author has pointed out that in liquor poisoning it is alcohol that poisons and not other ingredients, and that despite prohibition we are having a gradual increase in the death rate from alcoholic beverages, over 30,000 having died from that cause since prohibition was put into effect. It does not seem to us that this speaks well for the prohibition cause. Recently we received a letter from the old Keeley Institute which stated that the institution is treating as many alcohol addicts as at any time prior to prohibition, and yet we notice that some of the anti-saloon fanatics have published statements to the effect that the Keeley Institute is practically out of business and treating but a fraction of the number of alcohol addicts compared to the number treated before prohibition went into force. The thing we cannot understand is why fanatics and crusaders of every description who are trying to bring the world to their way of thinking resort to villification, distortion of facts, and even deliberate falsehood in attempts to bolster up their various causes. If a cause has merit it should win on merit. The leaders in the prohibition movement, the anti-vaccinationists, the anti-vivisectionists, and others of the kind hurt their several causes very much through the deception and dishonesty practiced by some of their leaders.

THE Scientific Committee of our Association, aided by suggestions from the Council, is arranging an interesting program for the annual session to be held in Fort Wayne the last week in September. Outstanding among some of the suggestions that are being accepted are the following: Papers at the general meetings are not to be

technical. The papers will deal with very common diseases. All papers must be shorter than most of the papers read at preceding sessions. The programs of the Sections also are not to be ultra-scientific, and discussants will not be permitted to report on individual cases but will be asked to limit discussions to principles rather than to reports of cases. The officers of the sections are urged to enforce rigidly the provisions of the by-laws concerning length of time given to papers and discussions, and especially to so limit the time allotted to individual papers and discussions that no essayist will be left out as a result of prolonging preceding papers and discussions. Very few out-of-state speakers will be invited, as it is thought that the bulk of the program should be presented by men residing in Indiana.

A criticism and comment that is pertinent pertains to the laxity and carelessness with which chairmen of sections uphold the established rule concerning the length of time to be given speakers, whether guests or members of the Association, in the presentation of papers as well as discussions. A fertile field for overstepping the bounds of rules as well as propriety is a paper of twenty minutes or more in length and the essayist granted further time for the presentation of stereopticon slides. If the officers will use the gavel without fear or favor, and if audiences will uphold the presiding officer in efforts to expedite matters, we will hear very little complaint concerning the injustices of granting over time. We have no patience with the essayist who declares that he cannot present his subject within a twenty-minute limit. In a long experience in wading through papers and addresses offered for publication, we have learned that many physicians iterate and reiterate, and devote a large amount of space to trivial features. Most of those who speak before medical societies ought to take a course in pruning and condensation of material.

WE are very much in sympathy with some of the suggestions and criticisms made by the editor of *The Jour. of the Kansas State Med. Soc.* concerning some of the features of the annual session of the state society. He says:

"In order that the three-hundred-fifty who did attend the meeting might be able to discuss these papers intelligently it would have been a good idea to have the secretary or someone with a good voice read them for the authors. Why would it not be a good plan to appoint a reader at each annual meeting, just for the purpose of reading for those who fail to make themselves heard?"

"Occasionally there is one who can put on an illustrated medical lecture successfully, but they are few and far between. In the first place lantern pictures require a good deal of explanation to be worth while and twenty minutes is not long enough to describe more than a few pictures in connection with a paper. Charts which appear to

be coming into fashion again are usually unintelligible when thrown on the screen, most of them being so prepared that the projected image cannot be read by a majority of the audience. A few years ago there was a fad for graphs and every lecture and published paper was accompanied by from one to twenty or more. They are seen rarely now, but charts and projected pictures were much in evidence at the last meeting. A few good pictures which really illustrate some particular point in the text of the paper may be worth while, but the majority of those usually shown don't tell the audience as much as would one or two carefully formulated sentences made up of carefully selected, plain, understandable English words.

"There are occasions when a lot of time is consumed entirely foreign to the question before the House, or about various things when there is no question before the House, but that is the fault of the presiding officer. Parliamentary rules were formulated for the purpose of expediting the proceedings of such bodies as our House of Delegates and lack of observance of these rules is responsible for a great deal of wasted time. And yet it seems that our delegates resent any attempt to enforce observance of these rules either by the presiding officer or other members of the House. Even when the presiding officer is experienced in parliamentary usage he hesitates to enforce the rules in face of the obvious displeasure of the members."

SECRETARIES' DEPARTMENT

THE SECRETARIES' CONFERENCE

Worthwhile, interesting, instructive, and a real party are the best words to describe the annual Indiana county medical society secretaries' conference that was held at the American Medical Association headquarters, 535 North Dearborn Street, Chicago, Wednesday, April 23rd. Sixty-five secretaries, including a scattering of officers and councilors of the State Association, were present as guests of the American Medical Association.

Following a morning's program of talks by the department and bureau heads of the American Medical Association, the entire group were luncheon guests of the A. M. A. at the Saint Claire Hotel. During the afternoon the visiting secretaries were divided in groups and a complete tour was made of the American Medical Association offices and building. All in all, it was very much worthwhile, and gave everyone present a clearer and more comprehensive idea of the enormous amount of work that the American Medical Association and its 500 employees are doing for the medical profession of the country than could be obtained from any amount of reading. The secretaries saw the many workers of the various departments on the job and gained an idea of the

many varied activities of the headquarters office.

The "flying circus" which was conducted between Indianapolis and Chicago on a special squadron of aeroplanes under the direction of the Curtiss-Wright and Embry-Riddle lines was perhaps the feature event of the meeting. Twenty physicians made the trip, and only one casualty resulted—that of Dr. O. T. Scamahorn, who suffered from *mal de mer* (or rather *mal de air*).

A. M. Mitchell, M.D., of Terre Haute, the presiding officer of the conference, was re-elected unanimously for the coming year. The members of the Secretaries' Conference Committee were reappointed as follows: A. M. Mitchell, Terre Haute, chairman; M. A. Austin, Anderson; H. C. Wadsworth, Washington; W. F. Carver, Albion; James B. Maple, Sullivan, and J. C. Burkle, Lafayette.

Just as soon as the motorbus arrived right on scheduled time at the A. M. A. headquarters, carrying the twenty members of the "aero squadron," the meeting got under way, the heads of the departments speaking in the following order:

American Medical Association Headquarters—W. C. Braun.

The Council on Medical Education and Hospitals—N. P. Colwell.

The Laboratory—P. N. Leech.

The Bureau of Investigation—Arthur J. Cramp.

The Council on Pharmacy and Chemistry—W. A. Puckner.

Publications of the American Medical Association—Morris Fishbein.

The Bureau of Legal Medicine and Legislation—W. C. Woodward.

The Bureau of Health and Public Instruction—John M. Dodson.

Your Association and the New Council on Physical Therapy—Olin West.

In addition, Pres. M. L. Harris of the American Medical Association and A. C. MacDonald, president of the Indiana State Medical Association, made short talks. This gave the secretaries a detailed and clear idea of the program of activities, the material equipment, and, best of all, a first hand acquaintanceship with the men who form the headquarters staff. These talks were preliminary to the visit in the afternoon.

The luncheon gave the Indiana men an opportunity to meet and know still further the headquarters group.

The secretaries have the Council to thank for the appropriation of \$1,000 to cover the actual expenses of the members who made the trip, and the American Medical Association for the interesting program, the luncheon, and most genuine hospitality.

The list of those who were present follows:

SECRETARIES OR THEIR REPRESENTATIVES

Adams County.....R. E. Daniels, Decatur
Allen County.....L. P. Harshman, Fort Wayne

Benton County.....V. L. Turley, Fowler
Boone County.....R. S. Ball, Lebanon
Carroll County.....E. H. Brubaker, Flora
Cass County.....H. G. Steinmetz, Logansport
Clark County.....E. P. Buckley, Jeffersonville
Clay County.....William Palm, Brazil
Clinton County.....J. A. VanKirk, Frankfort
Daviess-Martin.....B. O. Burress, Washington
Dearborn-Ohio.....W. J. Fagaly, Lawrenceburg
Decatur County.....W. E. Thomas, Greensburg
Delaware-Blackford.....Thos. R. Owens, Muncie
Elkhart County.....S. T. Miller, Elkhart
Floyd County.....P. H. Schoen, New Albany
Fountain-Warren.....A. L. Spinning, Covington
Fulton County.....M. M. Piper, Rochester
Grant County.....Frances Johnson, Marion
Hamilton County.....Ray W. Shanks, Noblesville
Hancock County.....J. L. Allen, Greenfield
Hendricks County.....O. T. Scamahorn, Pittsboro
Henry County.....R. A. Smith, Newcastle
Howard County.....W. J. Marshall, Kokomo
Jefferson County.....O. A. Turner, Madison
Jennings County.....D. L. McAuliffe, No. Vernon
Johnson County.....W. L. Portteus, Franklin
Lake County.....E. M. Shanklin, Hammond
Laporte County.....G. O. Larson, Laporte
Lawrence County.....R. B. Smallwood, Bedford
Madison County.....M. A. Austin, Anderson
Marion County.....C. A. Stayton, Indianapolis
Miami County.....C. R. Herd, Peru
Monroe County.....F. H. Austin, Bloomington
Montgomery.....G. A. Collett, Crawfordsville
Noble County.....W. F. Carver, Albion
Parke-Vermilion.....J. R. Bloomer, Rockville
Posey County.....S. W. Boren, Poseyville
Randolph County.....W. S. Dininger, Winchester
Ripley County.....R. L. Compton, Osgood
Rush County.....R. E. Shanks, Rushville
St. Joseph County.....Martha B. Lyon, South Bend
Scott County.....J. P. Wilson, Scottsburg
Spencer County.....C. L. Springstun, Chrisney
Tippecanoe County.....J. C. Burkle, Lafayette
Tipton County.....E. B. Moser, Windfall
Vigo County.....A. M. Mitchell, Terre Haute
Wabash County.....O. G. Brubaker, No. Manchester
Warrick County.....C. J. Munns, Newburgh
Washington County.....C. B. Paynter, Salem
Wayne-Union.....P. S. Johnson, Richmond
Wells County.....M. M. Gitlin, Bluffton
White County.....H. B. Gable, Monticello
Whitley County.....O. F. Lehmberg, Columbia City

COUNCILORS AND OFFICERS

G. D. Scott, Sullivan.....Councilor 2nd District
H. P. Graessle, Seymour.....Councilor 4th District
O. O. Alexander, Terre Haute.....Councilor 5th Dis.
J. B. Rogers, Michigan City.....Councilor 13th Dis.
A. C. McDonald, Warsaw.....President
T. A. Hendricks, Indianapolis.....Exec. Secretary

GUESTS

M. E. Leckrone.....Rochester
Nettie B. Powell.....Marion
J. B. Loving.....New Goshen

Chas. N. Combs.....Terre Haute
 Emmett Keating.....Chicago
 M. L. Harris.....Chicago

The twenty who made the trip by plane are:
 R. L. Compton, W. J. Fagaly, B. O. Burress,
 O. T. Scamahorn, J. P. Wilson, E. B. Moser,
 C. R. Herd, L. P. Harshman, W. J. Marshall,
 J. C. Burkle, Ray Shanks, P. S. Johnson, R. E.
 Shanks, E. P. Buckley, J. L. Allen, W. S. Din-
 inger, T. R. Owens, M. M. Piper, V. L. Turley,
 and M. E. Leckrone.

THOMAS A. HENDRICKS,
 Executive Secretary.

DEATH NOTES

SAMUEL E. EARP, M.D., of Indianapolis, aged seventy-one years, president of the Indiana State Medical Association in 1924, died April 14th, following a heart attack.



SAMUEL E. EARP

Doctor Earp graduated from the Central College of Physicians and Surgeons in Indianapolis in 1882 and that year began the practice of medicine in that city. He was a teacher in the Central College of Physicians and Surgeons, for seven years, holding the position of professor of materia medica and therapeutics in that institution, and for a number of years he was dean of the Central College of Dentistry in Indianapolis. For nearly twenty years he was clinical professor of medicine of the Indiana University School of Medicine. Doctor Earp was the first editor of the *Medical and Surgical Monitor*, from 1898 to 1903, then editor of the *Central States Medical Magazine*. In 1905 the two magazines were consolidated under the name of *Central States Medical Monitor*, of which Doctor Earp was editor-in-chief.

This magazine was later merged with the *Indiana Medical Journal*, and later became the *Indianapolis Medical Journal*, with Doctor Earp remaining at the head of its editorial staff.

Doctor Earp was a member of the Indianapolis City Board of Health for four years, served two years as city chemist, and later served as a member of the board of public health and charities. He was a member of the consulting staffs of several Indianapolis hospitals. From November, 1915, to April, 1919, Doctor Earp served, by appointment from President Wilson, as chairman of the U. S. Medical Advisory Board No. 56, Division 1, and in the World War was a member of the Volunteer Medical Service Corps, Council of National Defense.

He was president of the Indianapolis Medical Society in 1910, and for three years served as councilor for the seventh district in the Indiana State Medical Association. He was a Fellow of the American Medical Association, a member of the Indianapolis Academy of Science, the Indiana Historical Society of Applied Psychology, and several Masonic lodges. He received honorary degrees from Indiana University in 1916.

Surviving are the widow, Mrs. Evelyn Earp, and two sons—Dr. Evanson B. Earp, of Indianapolis, and Leon S. Earp, of Decatur, Illinois.

Medical men of Indiana will mourn the passing of Doctor Earp, whose long career has been devoted actively to research, writing and education while practicing in the sciences of medicine and surgery. He was a man of strong convictions and unassailable integrity—loyal to friends and to the profession he loved to well.

COLUMBUS L. MYERS, M.D., of Covington, died March 23rd, aged eighty years. Doctor Myers graduated from Rush Medical College, Chicago, in 1873.

A. H. MOORE, M.D., of Clinton Falls, died March 17th, aged seventy-eight years. Doctor Moore graduated from the Medical College of Indiana, Indianapolis, in 1881.

THOMAS J. WALSH, M.D., of Bedford, died March 22nd, aged twenty-six years. Death was caused by pneumonia. Doctor Walsh was a member of the Lawrence County Medical Society and the Indiana State Medical Association.

ROBERT H. ROSS, M.D., of Kokomo, died March 21st. Doctor Ross was a member of the Howard County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Medical College of Indiana, Indianapolis, in 1879.

WOODWARD HAYS, M.D., of Albion, died April 20th, aged forty-nine years. Doctor Hays was a member of the Noble County Medical Society,

the Indiana State Medical Association and the American Medical Association. He graduated from Rush Medical College, Chicago, in 1905.

E. L. LARKINS, M.D., of Terre Haute, died March 20th, aged seventy-four years. Doctor Larkins graduated from the Indiana Medical College, Indianapolis, in 1878. He was a member of the Vigo County Medical Society, the Indiana State Medical Association and the American Medical Association.

GEORGE T. MACCOY, M.D., of Columbus, aged eighty-three years, former president of the Indiana State Medical Association (1905), and for more than thirty-five years a practicing physician in Columbus, Indiana, died at his home April 4th, after a year's illness of complications due to his age.

Doctor MacCoy was born in Canaan, Jefferson county, in 1846. He was educated in the schools of the neighborhood, and when eighteen years old entered military service in the Civil War, with Company H, Tenth Indiana Cavalry. After the war he returned to Indiana and engaged in teaching school and studying medicine. He graduated from Miami Medical College, Cincinnati, in 1882. He moved to Columbus in 1884, where he practiced medicine until a very short time before his death.

Doctor MacCoy served as president of the Indiana Tuberculosis Association, and for many years served as a member and for two years was president of the Indiana State Board of Health. During the early days, when he was a member of the Board, a serious epidemic of diphtheria broke out and it was then that Doctor MacCoy introduced the use of antitoxin as a preventive, credited with being the first doctor in Indiana to use this method. Doctor MacCoy always was active in health campaigns, particularly in the fight against tuberculosis.

NEWS NOTES AND PERSONALS

THE Indianapolis Medical Society held a clinical meeting at the Methodist Hospital, April 15th.

DR. A. B. GRAHAM, of Indianapolis, has moved his office to 408 Hume-Mansur Building, from 224 North Meridian Street.

FORTY-FIVE physicians attended the March meeting of the Madison County Medical Society at the Hotel Stillwell, Anderson.

THE United States Civil Service Commission announces open competitive examination for dietitian, applications for which position must be on file with the Commission at Washington, D. C., not later than May 21, 1930.

THE Hamilton County Medical Society held a meeting April 8th at Cicero. Dr. A. B. Graham, of Indianapolis, presented a paper.

THE April 15th meeting of the Allen County Medical Society was a banquet meeting honoring Dr. Samuel Havice on his birthday.

DR. AND MRS. R. S. CLYMER, of Portland, have moved to Andrews, where Doctor Clymer will take over the practice of the late Doctor Harley.

THE nineteenth annual meeting and tuberculosis conference of the Indiana Tuberculosis Association was held at Richmond, April 17th and 18th.

DR. SAMUEL IGLAUER, of Cincinnati, presented a paper on "Bronchography" before the Indianapolis Medical Society at its meeting, March 25th.

THE regular seminar of the Indiana University School of Medicine was held March 28th with presentation of cases by Doctors Billings, Mehlin, Wiseman and Clevenger.

DR. CHARLES P. EMERSON, dean of the Indiana University School of Medicine, presented a paper on "Psychasthenia" before the Muncie Academy of Medicine at its regular meeting, April 29th.

THE Tippecanoe County Medical Society held its regular monthly meeting April 24th at Lincoln Lodge. Dr. R. B. Wetherill, of Lafayette, presented a paper on "Lost Cities of Yucatan."

MEMBERS of the Jasper-Newton County Medical Society were guests of Dr. J. G. Kinneman, of Goodland, April 4th. Dr. C. E. Johnson presented a paper, his subject being "Scarlet Fever."

THE Elkhart County Medical Society held its annual spring meeting at Elkhart, April 3rd, at the Hotel Elkhart. Dr. Francis Eugene Seneat, of the University of Illinois, was the principal speaker.

DR. AND MRS. ALBERT E. BULSON, of Fort Wayne, have returned from an extensive tour of the Orient, during which they visited China, Japan, Korea, Manchuria and the Philippine Islands, traveling 23,000 miles.

DR. J. A. MACDONALD, president of the Society, attended the meeting of the Muncie Academy of Medicine on May 6th, to discuss a paper presented by Dr. Arlie Barnes, of the Mayo Clinic.

DR. FRANK LAHEY, of Boston, addressed the Indianapolis Academy of Medicine at the Marott Hotel on May 1st. His subject was "The Diagnosis and Treatment of Gastric and Duodenal Ulcers."

THE Northeastern Indiana Academy of Medicine met at the Gawthrop Hotel, Kendallville, April 24th. Dr. Harry E. Mock, of Northwestern University Medical School, Chicago, presented the subject, "Skull Fractures."

At the April 18th meeting of the Indianapolis Medical Society, Dr. Stuart Pritchard, of Battle Creek, Michigan, presented a paper on "The Significance of Cough." This was a joint meeting with the Marion County Tuberculosis Association.

THE U. S. Civil Service Commission announces open competitive examinations for medical officer, associate medical officer and assistant medical officer. Applications for these positions will be rated as received by the Commission at Washington, D. C., until June 30, 1930.

THE Boone County Medical Society held a meeting at the Witham Hospital, Lebanon, April 1st. Dr. Robert Ball, president, announced the appointment of a board of censors composed of Dr. G. A. Owsley, Thorntown, and Drs. W. H. Williams and John Coons, Lebanon.

DR. WILLIAM J. MOENKHAUS, of Indiana University, talked on the "Sympathetic Nervous System" at the April 22nd meeting of the Allen County Medical Society. "The Treatment of Fractures" was the subject presented by Dr. A. D. LaFerte, of Detroit, at the April 29th meeting of the society.

THE Indiana University School of Medicine will conduct a summer school open to physicians, offering courses in general medicine, general surgery, obstetrics and dermatology. Other courses will be organized if there is sufficient demand for them. For information concerning these courses address Charles P. Emerson, Dean, Indiana University School of Medicine, Indianapolis, Indiana.

THE U. S. Civil Service Commission announces open competitive examination for associate pharmacologist, applications for which position must be on file with the Commission at Washington, D. C., not later than May 21, 1930. Examination is to fill a vacancy in the Hygienic Laboratory, Public Health Service, Washington, D. C., and vacancies occurring in positions requiring similar qualifications.

THE United States Civil Service Commission announces open competitive examination for associate medical officer (pathology), applications for which may be filed with the Civil Service Commission at Washington, D. C., until June 30, 1930. Entrance salaries range from \$3,200 to \$3,700 per year. Complete information may be obtained from the United States Civil Service Commission, Washington, D. C.

THE fifty-seventh annual meeting of the Northern Tri-State Medical Association was held in Fort Wayne, April 8th. Dr. Norris W. Gillette, of Toledo, Ohio, was elected president of the Association; Dr. D. J. Slosser, Defiance, Ohio, vice-president; Dr. E. D. Pedlow, of Lima, Ohio, secretary; Dr. G. Larson, of LaPorte, Indiana, treasurer. Ann Arbor was selected as the meeting place for the Association in 1931.

THE University of Minnesota Medical School will present a symposium on the Kidney in Health and Disease, to be held at the University of Minnesota Medical School, Minneapolis, July 7 to 18, 1930. The final program, including a brief synopsis of each lecture, will be issued before June 1st. There will be no registration fee. Correspondence should be addressed to Dr. Hilding Berglund, University Hospital, Minneapolis, Minnesota.

THE Elkhart County Medical Society held its annual meeting at Elkhart, April 3rd. Papers were presented by Dr. A. Frick, of the University of Illinois, whose subject was "Management of Peptic Ulcer"; Dr. O. E. Nadeau, of the University of Illinois, on "Goiter"; Dr. Ferris Smith, of Grand Rapids, Michigan, on "Asthma—Etiology and Treatment," and, at the evening session, by Dr. Francis Eugene Seneear, of the University of Illinois, on "Syphilis and Its Treatment."

DR. WILLIAM P. FINNEY, of the Mayo Clinic, Dr. Fred Cotton, of Boston; Dr. Carl D. Camp, of Ann Arbor; Dr. Joseph Brenneman, of Chicago; Dr. James H. Mitchell, of Chicago; Dr. Edward W. Ryerson, of Chicago; Dr. Charles A. Elliott, of Chicago; Dr. C. W. Waggoner, of Toledo, and Dr. Albert E. Sterne and Robert M. Moore, of Indianapolis, were speakers on the program of the Northern Tri-State Medical Association, which held its meeting in Fort Wayne, April 8th.

A FEW years ago the International Medical Club of New York was organized by a group of foreign medical graduates residing and practicing in the state of New York, with the participation of American medical graduates interested in the promotion of international medical relationship, with the object in view of establishing relationships between foreign and American medical organizations. Dr. J. W. Maliniak, 1125 Park Avenue, New York City, is president of the organization; Dr. Richard Kovacs, 223 East Sixty-eighth Street, New York City, secretary.

THE Indiana Roentgen Society will hold its spring meeting in Muncie on Saturday, May 24th. The program will include an informal luncheon for members at noon, business meeting and exhibition of films in the afternoon, a dinner at six-thirty p. m., and an address by Dr. A. W. Er-

skine, of Cedar Rapids, Iowa. There will be some kind of observance of the thirty-fifth anniversary of Professor Roentgen's discovery of x-rays. The arrangements for the meeting are in charge of Dr. Carl S. Oakman, of Muncie, who is president of the society. It is expected that there will be a number of wives of members who will accompany their husbands, and entertainment has been provided for them.

THE eighth annual summer graduate course in ophthalmology and otolaryngology, under the auspices of the Colorado Ophthalmological Society and the Colorado Otolaryngological Society, will be held at Denver, Colorado, July 28th to August 9th, 1930. Illustrated lectures will be presented by Drs. Jonas Friedenwald, Baltimore; Meyer Wiener, St. Louis; Alfred Cowan, Philadelphia; Edward Jackson, Denver; Melville Black, Denver; Richard W. Whitehead, Denver; William H. Crisp, Denver; John A. McCaw, Denver; James M. Shields, Denver; John F. Barnhill, Indianapolis; Lewis Fisher, Philadelphia; Lee W. Dean, St. Louis; Robert Levy, Denver; T. E. Carmody, Denver; Frank R. Spencer, Boulder, Colorado; and Harry L. Baum, Denver. Fee for the course is fifty dollars. Registrants limited to sixty-five. H. L. Whitaker, 1234 Republic Building, Denver, is the treasurer.

IN addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Eli Lilly & Co.:

Merthiolate Jelly, Lilly.

Merthiolate Ointment, Lilly.

E. R. Squibb & Sons:

Squibb's Dextro-Vitavose.

Frederick Stearns & Co.:

Synephrin:

Synephrin Solution "A."

Ampoules Synephrin—Procaine, 3 cc.

Hypodermic Tablets Synephrin-Procaine.

The following article has been exempted and included with the List of Exempted Medicinal Articles (New and Nonofficial Remedies, 1929, p. 481):

G. D. Searle & Co.:

Stable Solution Dextrose and Sodium Chloride (Searle).

INDIANA UNIVERSITY NEWS NOTES

THE Phi Rho Sigma professional medical fraternity at Indiana University held its annual spring dance at the Highland Country Club at Indianapolis, March 28th.

DEAN FREDERICK R. HENSHAW, of the Indiana University School of Dentistry, was elected president of the American Association of Dental

Schools at the recent meeting of the association in Toronto, Canada. Last year Dean Henshaw was vice-president of the association, an organization which includes all dental schools of the United States and Canada. Dean Henshaw is a fellow in the American College of Dentistry and holds membership in the American Dental Association, the Indiana Dental Association, the Indianapolis Dental Society, and the Chicago Dental Association.

DR. THOMAS J. WALSH, who was graduated from Indiana University Medical School in 1927, died recently at his home in Bedford, where he had been practicing medicine since his graduation.

PROF. J. A. BADERTSCHER, of the Indiana University School of Medicine, attended the forty-sixth session of the American Association of Anatomists held recently at Charlottesville, Virginia.

BERT J. VOS, JR., of Bloomington, has been awarded a scholarship for graduate study in biochemistry at the University of Chicago for the year 1930-31. Young Vos, who is the son of Dr. Bert J. Vos, head of the Indiana University German department, will graduate this June from the state university.

WORK especially adapted to the needs of medical students, teachers and investigators will be offered this summer at the Indiana University biological station at Winona Lake. The 1930 session will be the thirty-sixth annual session of the station. Registration will take place on June 14th and work will close on August 8th.

THE Theta Kappa Psi professional medical fraternity at Indiana University have nominated the following students for offices in the fraternity next year: James Lamey, Anderson, and Ward Bloom, Marion, for president; Henry Coleman, Palmyra, and Charles Holder, Bloomington, for vice-president, and Holder also for secretary-treasurer. These students will be voted on in the near future.

DR. CLARENCE E. MAY, of the Indiana University chemistry department, speaking recently before the Sigma Xi scientific society at the University pointed out that the thyroid glands with their several secretions are so important in their functions that the health and disposition of an individual may be changed very materially by the over or under-secretions of the glands. Tryptophane, especially, is one of the most important acids of the body, he said.

APPROXIMATELY 1,000 students are refused entrance into the medical schools of the United States and Canada every year, according to a report made by Dr. B. D. Myers, dean of the

Indiana University Medical School at Bloomington, after a four years' study on the subject. In regard to the admission of women into the medical schools, Dean Myers discovered that if there is any discrimination at all, it is in favor of the women. More than sixty-five percent of the women applicants are accepted, while only fifty-one percent of the men gain admittance.

DR. W. D. GATCH, prominent Indianapolis surgeon and member of the Indiana University Medical School staff at Indianapolis, spoke recently before the Monroe County Medical Association meeting at Bloomington. "Every individual is born with certain potentialities which cannot be aided by environment and education, and many diseases are due to such inherited tendencies," Doctor Gatch said at the meeting.

TWELVE Indiana University seniors of the medical school who will receive the M.D. degrees this June have been chosen to serve as internes at the Indiana University hospitals in Indianapolis. Their selection was based on personality and scholastic and general ability. They are Max R. Adams, Holton; W. Leland Sharpe, Greenwood; Robert G. Thayer, Indianapolis; Ernest L. Mock, Huntington; Leon J. Garrison, Summitville; Mae Deal, Indianapolis; Ralph S. Sappenfield, Indianapolis; Joseph D. Coate, Muncie; Tyler J. Stroup, Indianapolis; Crawford N. Baganz, Terre Haute; Warren R. Hickman, Logansport; C. A. Burroughs, Lowell.

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

March 25, 1930.

Meeting called to order at 4:30 p. m.

Present: William N. Wishard, M.D., chairman; Chas. P. Emerson, M.D., James H. Stygal, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held March 18th read and approved.

The release, "Early Diagnosis of Tuberculosis—Protect Your Child," read and approved for publication Saturday, April 5th. A member of the committee who is a specialist in tuberculosis was delegated to make a special review of the release before it is formally approved by the Bureau.

Radio release, March 29th, "Early Diagnosis of Tuberculosis—Protect Your Child."

The material from the director of the Child Hygiene Division of the Indiana State Board of Health asking for and making some suggestions in regard to pre-natal and maternity education in Indiana was discussed by the Bureau. The following letter was approved to be sent to the director of the Child Hygiene Division:

"The Bureau of Publicity of the Indiana State Medical Association has received and is much interested in your recent communication. In reply the Bureau of Publicity would suggest the following points:

1. Appointment of a committee by the State Medical Association to map out a definite program of procedure.
2. Careful study of the work in other states, especially California and Kentucky.
3. Experts to be sent out by the State Medical

Association to explain latest obstetric methods at county medical meetings.

4. Physicians temporarily employed by the State Board of Health for such investigations as are suggested by your communication are likely to be persons without adequate permanent professional work and in the nature of things they would not be drawing cards for medical meetings.

5. Instruction with a manikin is very elemental and, while it has its value, it is not the type of teaching desirable for practitioners. While students in medical schools have their early teaching illustrated by the manikin, all senior students are required to have practical bedside obstetric experience and training.

6. Cooperation with the State Board of Health in every way possible but at the same time controlling the speakers from the State Medical office.

7. Preparation of papers by experts dealing with pre-natal care and obstetric care which could be published by the Bureau of Publicity.

8. Regional postgraduate short courses conducted by the Indiana University Medical School. These courses could be held at several strategic hospital points in the state.

"The Bureau of Publicity of the Indiana State Medical Association and the Indiana University School of Medicine are already conducting educational work along the line suggested in your communication. Trained obstetricians who are teachers in this department are giving lectures and conducting discussions before district and county medical societies of the state.

"The Indiana State Medical Association and the Indiana University School of Medicine will be glad to cooperate with the State Board of Health in conducting educational work along the lines of pre-natal care and the newer methods in obstetrics and will, at the request of the State Board of Health or medical societies throughout the state, furnish trained speakers for such work."

Reports of medical meetings:

March 11—Henry County Medical Society, Newcastle: "Significance of Heart Sounds."

March 14—Adams and Jay County Medical Societies, Decatur: "Cerebro-spinal Fever."

Request for speaker:

June 5—Fountain-Warren County Medical Society, Covington: "Toxæmia of Gestation." Speaker to be chosen.

Secretary to correspond with the secretary of the Fountain-Warren County Medical Society relative to this meeting.

The following form letter was sent to 121 editors of newspapers who had not been receiving our releases regularly:

"For several years the Bureau of Publicity of the Indiana State Medical Association has prepared and distributed free of charge to the newspapers of Indiana weekly bulletins telling of new developments in medicine, giving information upon various diseases, and making suggestions concerning individual and community health.

"These bulletins have been written in language that the average reader can understand and an attempt has been made to make them as interesting and, at the same time, as scientifically correct as possible.

"In checking over our records we find that your paper is not on our mailing list. If you should desire to have the name of your paper placed upon our mailing list to receive these weekly bulletins, please return the enclosed postcard with the name and address of the person to whom they should be sent."

Thirty cards were returned requesting that the articles be sent to these newspapers regularly. Only one editor expressed any feeling against using the material.

Letter received from woman in Glenwood concerning the recent release upon "Trachoma."

Letter received from the chairman of the Diphtheria Committee asking whether the Bureau of Publicity would be able to stand some of the expenses for speakers who

would talk upon diphtheria prevention before luncheon clubs. The Bureau of Publicity went on record favoring the payment of the actual expenses of such speakers sent out by the Diphtheria Committee when the meetings were authorized by the Publicity Bureau.

Word received from the president of the Indiana State Medical Association appointing Dr. James H. Stygall, of Indianapolis, to fill the unexpired term, which began January 1, 1930, and ends December 31, 1933, left vacant in the Bureau by Dr. J. A. MacDonald's resignation. Doctor Stygall formally notified of his appointment. Upon the unanimous action of the Bureau the secretary was instructed to send a letter to Doctor MacDonald, the retiring member of the committee, expressing the appreciation of the committee for the interest and effective manner in which Doctor MacDonald participated in the work of the Bureau of Publicity during his membership on the committee for the last three years, and wishing him every success in his administration work as president of the Indianapolis Medical Society.

Letter brought to the attention of the committee from the secretary of the History Committee of the Illinois State Medical Society asking for information concerning the journal called *The Sanitarian* that is thought to have been published at one time in Laporte. None of the committee members was familiar with such a journal.

The following bills were approved for payment:

| | |
|-------------------------------------|---------|
| Central Press Clipping Service..... | \$ 5.00 |
| A. B. Dick Company..... | .35 |
| A. B. Dick Company..... | 3.50 |
| | <hr/> |
| | \$ 8.85 |

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole April 1, 1930.

April 1, 1930.

Meeting called to order at 4:30 p. m.

Present: Wm. N. Wishard, M.D., chairman; James H. Stygall, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held March 25th read and approved.

The release, "Taking the Ax Out of Laxatives," read and approved for publication Saturday, April 12th.

Radio releases from the Marion County Tuberculosis Association approved for broadcast on the following dates: April 5th, April 12th, April 19th and April 26th.

Reports of medical meetings:

March 25—Grant County Medical Society, Marion: "Common Skin Diseases."

March 28—Miami County Medical Society, Peru: "Early Recognition of Tuberculosis."

Meeting to be held:

June 5—Fountain-Warren County Medical Society, Covington: "Toxæmia of Gestation." Speaker selected.

A letter supplementary to that sent to the director of the Child Hygiene Division of the Indiana State Board of Health was suggested by the committee. This supplementary letter was to call attention to the fact that the services of members of the staff of the Indiana University School of Medicine and the Indiana State Medical Association in conducting educational work along pre-natal lines would be rendered without charge. The staff of such speakers will be composed of specialists and hence their work presumably will be of a higher order than that of persons temporarily employed at the state's expense. This suggestion was unanimously adopted by the committee and the secretary instructed to send this supplementary statement to the director of the Child Hygiene Division of the Indiana State Board of Health.

Upon the unanimous action of the Bureau the following article suggested by the National Hospital Day Advisory Committee of the American Hospital Association was to be contained in the published minutes of the Bureau:

"National Hospital Day is now annually celebrated by thousands of hospitals in Canada and the United States, as well as other lands, because it provides the means of directing public attention to the great work which these institutions do in the humanitarian cause. The movement originated eight years ago and was an expression of the widely growing feeling that communities were not only entitled to information about hospital endeavor, but should in their turn afford more definite support to these projects which contribute to the health and happiness of citizens in general. The hospital today functions as a most important and essential utility and is closely related to the program of public health activities.

"The observance of National Hospital Day also commemorates the birthday of Florence Nightingale, who must not only be recalled, in the figure of romance, as the ministering angel moving with her lamp down the long lanes of pain in the military hospital at Soutari, but even more thankfully because she wrought a revolution in hospitals and made nursing a science. Every modern hospital with its extensive equipment, staff of workers, and evidence of skill applied in the treatment and amelioration of disease is in a sense the gracious product of that revolution.

"The particular object of the National Hospital Day movement is to encourage the public to visit a hospital on May 12th so that all may become acquainted with the methods of conducting these institutions, their curative, custodial, educational and research activities, and by so doing to dispel the old-time fear of the hospital and to compel the conviction that it is the proper place to come to when one is ill."

The Bureau also approved the suggestion that the newspaper releases for Saturday, May 10th, be upon National Hospital Day.

The following letter was received from a special representative of the National Food Bureau who recently had visited the headquarters office:

"I have just returned to the office and want to thank you for your cooperation and interest in the articles that have appeared in the newspapers; also the special news letter that was sent to the medical profession.

"This is what helps to eliminate these food faddists and quacks from preying on the public."

Letter received from an Indiana physician telling of a "Dr." Frank McCoy who is writing a health article daily for his newspaper in which opinions are continuously expressed which are not complimentary to the medical profession. This letter was to be referred to the National Food Bureau.

Article, "Doctors and Their Ethics," published in *Liberty* of April 5, 1930, brought to the attention of the committee.

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole April 8, 1930.

April 8, 1930.

Meeting called to order at three p. m.

Present: Wm. N. Wishard, M.D., chairman; James H. Stygall, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held April 1st read and approved.

The following letter received from the *Post and Commercial-Mail* at Columbia City, Indiana:

"At the present time in this community there are a number being treated for 'trench-mouth' by local dentists and physicians.

"If you have a bulletin such as we receive weekly through the secretary of the Whitley County Medical Society, telling of this disease and preventive treatment, we feel that by publishing it both the association and the newspaper would be rendering the public a valuable service."

As a result of this letter the release entitled "An Unpaid War Debt," upon trench mouth, was prepared and approved for publication Saturday, April 19th.

Requests for speakers:

April 8th—Rotary Club, Sheridan, Indiana: "The Conquest of Disease." Speaker obtained.

April 24—Cass County Medical Society, Logansport, Indiana. Arrangements being made for speaker.

May 21—Indiana Pharmaceutical Association, Lafayette, Indiana. Matter to be brought to the attention of the Bureau at next regular weekly meeting.

June 5—Fountain-Warren County Medical Society, Covington, Indiana. Arrangements completed for speaker.

The following letter was received from the director of the Division of Infant and Child Hygiene of the Indiana State Board of Health in answer to recent letter of the Bureau of Publicity:

"Your kind letter of March 26th, together with the report of the Bureau of Publicity of the Indiana State Medical Association, has been received.

"I think the State Medical Association will act very wisely in appointing a committee to map out a definite program as that will focus interest on the subject and the findings of the committee will be likely to be received with interest.

"There are many other states besides California and Kentucky that have been conducting splendid programs. The reason I suggested those two was because of the demonstrations that have been given to physicians in both states. A plan similar to the one you suggest has been tried out in Virginia.

"I think it would be very fine to have papers prepared on these subjects published by the Bureau of Publicity. They will thus reach both men and women.

"I think regional postgraduate courses would be a very splendid thing and would be glad to see a series of them at different points throughout the state. If we can be of any assistance in creating interest in such courses, I shall be very glad to help.

"We have kept in mind the work of the Bureau of Publicity in conducting educational work already under way and would be glad to see the work extended. We shall be glad to suggest to organizations that they secure speakers through your Bureau as we are frequently asked for more talks than can be given by physicians in this department.

"As to Doctor Parsons, whom I mentioned in a former letter, we find that California likes her work so well that she has been employed permanently in the Los Angeles demonstration and would not consider coming to Indiana because of the lower salaries paid here.

"If any further conclusions are reached by the committee suggested, we shall be very glad to know of them."

Committee informed that letter had been written to the American Hospital Association in accordance with the instructions of the Bureau of Publicity at its meeting April 1st. In this letter the appreciation of the Bureau was expressed of the work that is done each year by the National Hospital Day Committee and assurances were given that the Hospital Committee would receive the heartiest cooperation of the profession of Indiana. The letter also contained a request that the National Hospital Day Committee send material to the headquarters office in order that a newspaper release concerning National Hospital Day, which is to be observed May 12th, may be prepared for publication on Saturday, May 10th.

Bulletins from the Better Business Bureau for the weeks of March 27th and April 3rd were brought to the attention of the Bureau of Publicity. The bulletin of March 27th, entitled "Cooking Cancers a la Duncan," had to do with a newspaper advertising campaign that was planned to be carried on through the newspapers of Indianapolis by Lida Chase Duncan, of Cleveland, Ohio, self-styled "The Miracle Woman." According to the bulletin, "'Doctor' Duncan offers to sell an electrical device which she describes as a 'Genuine Coagulating Machine'" which was to be advertised as being a sure cure when used for no less than thirty-seven ailments.

The Duncan literature holds out even a higher hope, that is, "If you follow the advice of 'Doctor' Duncan, you will not know the meaning of the words sickness, operation or death."

The bulletin of April 3rd comments as follows upon radio-active products:

"On February 4, 1930, the United States Department of Agriculture issued a press release headed: 'Concoctions Claiming to Contain Radium Are Fakes in Many Cases,' which for the information of the public we reproduce herewith *in toto*:

"Highly exaggerated claims, evidently designed to mislead the purchaser, are made for many alleged radio-active products," says J. W. Sale, an expert of the U. S. Food, Drug, and Insecticide Administration, the organization of the Department of Agriculture charged with the enforcement of the Federal Food and Drugs Act.

"Only five percent of the products claimed to be radio-active that were analyzed were found to contain material quantities of radium," says Mr. Sale.

"Under Mr. Sale's supervision, analysis for radium content has been made of hair tonics, bath compounds, suppositories, tissue creams, tonic tablets, face powders, ointments, mouth washes, demulcents, opiates, ophthalmic solutions, healing pads, and other preparations in solid, semi-solid, and liquid form for which therapeutic value was claimed on the ground of 'radio-activity.'

"One of the articles examined consisted of a short glass rod, one end coated with a yellow substance, enclosed in a glass bulb. This device hung over a bed would, according to the inventor, disperse 'all thoughts and worry about work and troubles, and bring contentment, satisfaction, and body comforts that soon result in peaceful, restful sleep.'

"In order to obtain a minimum daily dosage of radio-activity it would be necessary to drink 1,957 gallons of water each day, in the case of one of the alleged radio-active waters examined.

"Action is being taken under the Federal Food and Drug Acts against alleged radio-active products which are falsely or fraudulently misbranded under the terms of the law. Many have already been removed from the channels of trade and others are under investigation.

"Although most of the products are found to be deficient in radium, they might be dangerous if they contained too much, says Mr. Sale. Radium in active dosage can do harm as well as good and should be administered with great caution."

The Bureau of Publicity expressed its gratitude for the splendidly efficient work that is being carried on by the Better Business Bureau in ferreting out and bringing to light the misrepresentations of these quacks.

A report received from the Committee on the Cost of Medical Care was brought to the attention of the Bureau and will be considered in detail at the next meeting.

The following bills were approved for payment:

| | |
|--|---------------|
| Central Press Clipping Service..... | \$ 5.00 |
| Kautz Stationery Company..... | .50 |
| Canode Ink & Office Supply Co., Inc..... | 2.00 |
| | <hr/> \$ 7.50 |

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole April 15, 1930.

INDIANA STATE BOARD OF HEALTH DIVISION OF COMMUNICABLE DISEASES MONTHLY REPORT, APRIL, 1930

Morbidity reports were received from eighty-nine counties in the state during the month. Three counties, War- rick, Warren and Perry, sent in negative reports. There were 535 negative report cards sent in this month.

The current prevalence of diseases as indicated by the reports from the health officers is shown below by the name and number of diseases from the urban and rural population as follows:

| DISEASE | TOTAL | URBAN | RURAL |
|-----------------------|-------|-------|-------|
| Tuberculosis | 142 | 89 | 53 |
| Chickenpox | 298 | 257 | 41 |
| Measles | 399 | 213 | 186 |
| Scarlet fever | 749 | 407 | 342 |
| Smallpox | 690 | 374 | 316 |
| Typhoid fever | 10 | 5 | 5 |
| Whooping cough | 163 | 89 | 74 |
| Diphtheria | 83 | 34 | 49 |
| Influenza | 66 | 00 | 66 |
| Pneumonia | 27 | 4 | 23 |
| Mumps | 38 | 27 | 11 |
| C. S. meningitis..... | 56 | 33 | 23 |
| Undulant fever | 3 | 3 | 0 |
| Leprosy | 1 | 1 | 0 |

A marked decrease is noted in the number of cases of all diseases reported over the previous month, except undulant fever and leprosy.

Scarlet fever was the most prevalent disease reported this month. This is normal for the season. Nine hundred sixty-one cases the preceding month, and 819 cases same month the previous year. The estimated expectancy was 772 cases. The estimate is based on the experience of the last seven years.

Measles. The early spring months is measles time. April is the peak month. This is an off year for the disease. Four hundred ninety-three cases the previous month. The corresponding month the preceding year, 1,929 cases were reported. The estimated expectancy was 2,745 cases, including epidemics. The epidemic years for the period were 1926 and 1923 when 6,892 and 4,421 cases were reported, respectively.

Smallpox is perennial, although a substantial decrease is noted over the previous month. Seven hundred eighty-one cases last month. Same date last year only 205 cases were reported. The normal average for April over the estimated period, seven years, is 525 cases. Everyone knows the answer to the prevalence of smallpox.

Typhoid fever goes along at about an even tenor. Twelve cases preceding month. Twenty-seven cases in April last year. The average is sixteen cases. Hardly typhoid time yet. The disease is most prevalent in late summer and early autumn.

Diphtheria should decline in face of the educational drive that is being waged against it by the Visual Educational Division of the State Board of Health. Only fifty cases were reported the previous month. The estimated expectancy was one hundred eleven cases.

Cerebro-spinal Meningitis. An encouraging reduction is noted. Eighty-nine cases last month. Marion county shows twenty-two cases. The remaining thirty-four cases reported were distributed over eighteen counties. Cities reporting cases and number are as follows: Indianapolis, nineteen; Garrett, five; Fort Wayne, three; Bicknell, Elwood, Gary, Martinsville, South Bend and Terre Haute one case each.

Undulant Fever. The three cases reported were from the findings in the laboratory of the State Board of Health. One case each were sent in from Salem, Crawfordsville and Anderson. The Salem case was reported in the regular way from Dr. E. E. Huckleberry, Salem, to Dr. S. A. Roberts, health officer of Salem. The other two cases have not been reported. No doubt, there are other cases of undulant fever in the state that have not been diagnosed as such or have not been reported.

Leprosy. The one case reported was from Indianapolis. The case was a patient in the Indianapolis City Hospital. The diagnosis was made by Doctors Kelley and Kinne-man, interne physicians, through the assistance of the City Hospital laboratory. The case has been transferred to the government Leprosorium at Carville, Louisiana, by L. J. Rail, investigator, Indiana State Board of Health, under Federal Government supervision.

The Director made an investigation of an outbreak of smallpox in Russellville and Putnam county.

H. W. MCKANE, M.D.,
Collaborating Epidemiologist,
Indiana State Board of Health.

DEARBORN-OHIO COUNTY MEDICAL SOCIETY

The Dearborn-Ohio County Medical Society held a joint meeting with the members of the Southeastern Indiana Dental Society at the Dearborn Club, Aurora, February 25, 1930. A dinner was served before the meeting. Reading of the minutes was omitted, the secretary being absent. The committee in charge of the March meeting made no report. Doctors Jackson, Downey and Libbert were appointed members of the program committee for the April meeting. The Committee on Resolutions reported concerning the death of Doctor Elfers.

The paper of the evening was presented by Doctor Eberly, whose subject was "The Relationship Between the Physician and the Dentist." His talk was illustrated by lantern slides. Discussion was opened by Doctor Jackson and was continued by a large number of the physicians present.

Total attendance at the meeting was twenty-one.

Respectfully submitted,

LEE KEIDEL, M.D.,
Acting Secretary.

TIPPECANOE COUNTY MEDICAL SOCIETY

The Tippecanoe County Medical Society met in regular session April 10, 1930. President McCay presided. Dinner was served at Lincoln Lodge to fifty-six.

Representatives were present from White county, Cass county, Carroll county, Montgomery county, Benton county, and Indianapolis.

At the business meeting following the dinner the minutes of the previous meeting were read and approved.

Communications were read, including one from each of the senators and Representative Wood, stating their desire to cooperate with the medical profession regarding the handling of narcotics. One important communication from Dr. George B. Follansbee, of Cleveland, was read, urging the members to read the January *Graphic Survey* regarding medical economics.

The applications of N. B. Combs and E. S. Baker were read the second time, being properly accepted by the Board of Censors. Motion was made, seconded and carried that we waive the constitution and by-laws for the time being and proceed to elect the applicants to membership by acclamation. Motion was made and carried that Dr. E. S. Baker be elected to membership in our society by acclamation. Motion was made and carried that Dr. N. B. Combs be elected to membership in our society by acclamation.

The application of A. M. Mayfield, of Montmorenci, was read for the first time and referred to the Board of Censors.

Motion was made and carried that the meeting on April 24th, known as the Doctor Wetherill meeting, be held at Lincoln Lodge.

Motion was made and carried that a bill for \$1.75 to Amy B. Byler for mimeographing, and one for \$2.00 to Leon Howey for extra meals, be allowed.

The president introduced Dr. F. S. Crockett, who in turn introduced the speaker, Dr. John P. O'Neil, of Chicago, who chose for his subject "Tuberculosis Infections of the Kidneys and Urinary Tract." Doctor O'Neil gave a very vivid description of the formation of the so-called calcareous bodies by which process nature wards off and renders harmless tubercle bacillus. He also gave a very important point in diagnosis of pus in the body by means of the white cell count.

Doctor O'Neil has done a great amount of original work in this line and is an outstanding authority. The address was enjoyed by everyone present. Several took part in the discussion. Doctor Crockett discussed particularly the surgical side of tuberculosis of the kidney, giving the results of a large series of cases which he has followed.

Motion to adjourn was carried.

J. C. BURKLE,
Secretary.

ST. JOSEPH COUNTY MEDICAL SOCIETY

April 18, 1930.

The regular meeting of the St. Joseph County Medical Society was held in the Public Library, March 25, 1930, with Doctor Geisler presiding.

Dr. Fred Buechner was unanimously elected a member of the society.

The program consisted of an obstetrical symposium with the following men contributing:

Dr. Thos. B. Pauszek—Toxemia of Pregnancy.

Dr. D. A. Bickel—Treatment of Placenta Previa.

Dr. D. H. Condit—Common Sequelæ of Delivery.

Dr. F. R. Clapp—Cesarean Section.

Doctor Pauszek reviewed the literature on toxemia of pregnancy. He spoke of the conditions producing toxemia, the types of toxemia; prevention and treatment.

Doctor Bickel said that: "During the past two decades the mortality from placenta previa has been reduced from twenty to three percent. This is due to early diagnosis, prompt treatment and safer methods of delivery.

"The majority of cases are best treated by abdominal section. The cervical cesarean or laparotrachelotomy should replace the classical cesarean as an operation for patients with placenta previa.

"Rupture of the membranes, metruerysis, gauze, packing and Braxton Hicks version are indicated procedures in some cases. A review of almost all American and European literature for the past ten years shows a maternal mortality where conservative treatment was practiced of 10.2 percent, and where abdominal section was frequently resorted to it was three percent.

"Blood transfusion may be a life-saving adjunct with any method of delivery."

Doctor Bickel treated nine cases during the past five years with no maternal deaths and all the viable babies (seven) were saved.

Doctor Condit spoke of the simple sequelæ of delivery common to all women, such as cervical tears and relaxation of the pelvic floor with the present approved treatment.

Doctor Clapp reviewed the Cesarean section cases that had occurred at Epworth Hospital in the past five years. He pointed out the steady improvement in the mortality from year to year, which he thought was due to more careful diagnosis of conditions and better surgical technic.

Discussion was by Drs. M. W. Lyon, Jr., Savery, Knott (of Plymouth), Knapp, Abel, Hillman, Green (of Dowagiac), and Steven (of Plymouth).

The St. Joseph County Medical Society met in the public library April 1, 1930, with the president, Doctor Geisler, in the chair.

The application for membership of Dr. Paul R. Irely, of Plymouth, was read and turned over to the Board of Censors.

Doctor Irely, of Plymouth, reported a case of rupture of ulcer in the lesser curvature of the stomach in a boy of nineteen.

The paper of the evening was by Dr. Alfred Ellison on "Static Defects of the Feet."

No abstract is given as Doctor Ellison wishes to publish the paper in its entirety. The paper was discussed by Doctors Bolling, Meyers, Fisher, Green, Miller, and Darden.

The St. Joseph County Medical Society were guests of the St. Joseph Valley Section of the American Chemical Society at Notre Dame University Wednesday, April 9, 1930.

Dinner in the University dining hall was served to thirty-five members and guests at 6:30.

The program consisted of a paper by Dr. Paul N. Leech of the Laboratory of the American Medical Association on "Modern Chemotherapeutic Tendencies."

Doctor Leech spoke of the new drugs developed in the Academic Research Laboratories of the Universities and those from the commercial laboratories of the pharmaceutical houses; the manner in which the A. M. A.

Laboratory tried to protect the physician and thence the people; the evils of advertising, and the various trade names under which the same drug may be sold; also the action of the natural drug and that of the synthetic preparation.

The paper was illustrated by lantern slides of some of the more intricate chemical formulæ of various well-known organic preparations used as drugs. Some of the preparations discussed were parathyroid, thyroxin, insulin, ethane, ephedrin, and mercurochrome.

Questions were asked by Mr. Taggett, a chemist, and Dr. M. W. Lyon, Jr., and Doctor Warwich, of Elkhart.

The meeting adjourned about 10:15 p. m.

MARTHA BREWER LYON, M.D.,
Assistant Secretary and Treasurer.

CORRESPONDENCE

LIQUOR PRESCRIBING BY PHYSICIANS

Portland, Indiana, January 27, 1930.

Editor THE JOURNAL:

I see by your editorial in THE JOURNAL that you are disgusted with the "bone dry law" in this state, which does not permit physicians to prescribe whiskey when they think it is necessary. I am a temperance man and, while I practiced in Kentucky, I had the privilege of prescribing whiskey when I thought it necessary. I am not necessarily a prohibitionist, because I do not think laws prohibit *per se*, but I do think that a law that says all physicians are crooks is a reflection on the profession.

What I want to know is why the House of Delegates of our State Medical Association does not go on record as asking for the modification of the Wright "bone dry law." Is it because all physicians are "bone dry" or is it because they have not the "guts" to get up and say what they think? Or is it that one physician is so spineless or so dry that he doesn't want to prescribe whiskey when necessary and is so narrow that he is afraid that his neighbor who does prescribe whiskey will get some of his patients? In Kentucky I was the only one in my county who took out the permit, and when one of my brother physicians thought his patient needed whiskey he would come to me and I would give his patient a prescription, as I had a right to do. There was no jealousy with us. I know physicians in this state who prescribe bootleg whiskey for their patients. In doing this they cause four people to violate the law, whereas, if we had the right to prescribe whiskey, as we should have, no one would be violating the law. Of course, as long as the laws are made by fanatics we must expect fanatical laws and violations of those laws.

Yours truly,

B. M. TAYLOR, M.D.

BOOK REVIEWS

Books received since April 1, 1930:

MODERN OTOLGY. By Joseph Clarence Keeler, M.D., F.A.C.S., Associate Professor of Otolaryngology, Jefferson Medical College, etc. Ninety original illustrations and fifteen colored plates; 858 pages. Cloth. Price \$10.00. F. A. Davis Company, Philadelphia, publishers, 1930.

THE NORMAL DIET. A Simple Statement of the Fundamental Principles of Diet for the Mutual Use of Physicians and Patients. By W. D. Sansum, M.S., M.D., F.A.C.P., director of the Potter Metabolic Clinic, Department of Metabolism, Santa Barbara Cottage Hospital, California. Third revised edition; 134 pages. Cloth. Price \$1.50. C. V. Mosby Company, St. Louis, 1930.

CANCER OF THE BREAST. By William Crawford White, M.D., F.A.C.S., junior surgeon to the Roosevelt Hospital, etc. This book is one of Harper's Medical Monographs. 221 pages. Flexible binding. Price \$3.00. Harper & Brothers publishers, New York and London, 1930.

UTERINE TUMORS. (Harper's Medical Monographs). By Charles C. Norris, M.D., professor of gynecology and

obstetrics and director of the department, University of Pennsylvania, etc. 250 pages. Flexible binding. Price \$3.00. Harper & Brothers publishers, New York and London, 1930.

NORMAL FACTS IN DIAGNOSIS. By M. Coleman Harris, M.D., and Benjamin Finesilver, M.D. 247 pages. Illustrated with forty-two engravings, some in colors. Cloth. Price \$2.50. F. A. Davis Company publishers, Philadelphia, 1930.

VARICOSE VEINS. With special reference to the injection treatment. By H. O. McPheeters, M.D., F.A.C.S., Director of the Varicose Vein and Ulcer Clinic, Minneapolis General Hospital, 233 pages, illustrated. Second revised and enlarged edition. Cloth. Price \$3.50. F. A. Davis Company publishers, Philadelphia, 1930.

TRAUMA, DISEASE, COMPENSATION. A Handbook of Their Medico-Legal Relations. By A. J. Fraser, M.D., chief medical officer, Workmen's Compensation Board, Winnipeg, 524 pages. Cloth. Price \$6.50. F. A. Davis Company publishers, Philadelphia, 1930.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

BUTESIN PICRATE EYE OINTMENT.—An ointment containing one percent of butesin picrate (New and Nonofficial Remedies, 1929, p. 54) in a petrolatum base. Abbott Laboratories, North Chicago.

PNEUMOCOCCUS ANTIBODY SOLUTION, TYPES I, II AND III COMBINED-MULFORD (New and Nonofficial Remedies, 1929, p. 346).—This product is also marketed in packages of four fifty cc. double-ended vials with one complete intravenous outfit. H. K. Mulford Co., Philadelphia.

AMPULES DEXTROSE (D-GLUCOSE) 10 GM., 20 CC.—Each ampule contains dextrose (New and Nonofficial Remedies, 1929, p. 240) 10 Gm., in distilled water, to make 20 cc. Lakeside Laboratories, Inc., Milwaukee, Wisconsin.

AMPULES SODIUM CACODYLATE 0.243 GM. (3¾ GRAINS), 5 CC.—Each ampule contains sodium cacodylate (New and Nonofficial Remedies, 1929, p. 73) 0.243 Gm. (3¾ grains) in 5 cc. of solution. Lakeside Laboratories, Inc., Milwaukee, Wisconsin.—(*Jour. A. M. A.*, March 1, 1930, p. 634).

SQUIBB'S DEXTRO-VITAVOSE.—A mixture of Squibb's vitavose (New and Nonofficial Remedies, 1929, p. 244), 1 part, and dextrose, 2 parts. E. R. Squibb & Sons, New York.—(*Jour. A. M. A.*, March 29, 1930, p. 920).

FOODS

The following products have been accepted as conforming to the rules of the Committee on Foods of the Council on Pharmacy and Chemistry of the American Medical Association:

PETER PAN BREAD (P. F. Peterson Baking Co., Omaha).—A thoroughly baked, white bread having a soft velvety texture and sweet flavor.

CLAPP'S ORIGINAL APPROVED BABY SOUP AND STRAINED VEGETABLES (Harold H. Clapp, Inc., Rochester, N. Y.).—Baby Soup: A combination of beef juice and vegetables. Wheatheart Soup: A combination of wheat germ, vegetables and cereals. Strained Vegetables: Spinach, wax beans, carrots, asparagus, peas, beets, prune pulp, apricot pulp and tomatoes. In these products all possible food values are retained and the least amount of water is used in cooking.

CHECKR-REDI-COOKED OATS OR CHECKR ROLLED OATS (Ralston Purina Co., St. Louis).—Checkr-Redi-Cooked Oats have been precooked to bring out their mellow flavor and to make them quickly prepared and easily digested.

MINUTE GELATIN (Minute Tapioca Co., Inc., Orange, Mass.).—Pure granulated gelatin offered in convenient size cartons for household use.—(*Jour. A. M. A.*, March 1, 1930, p. 635).

BORDEN'S SWEET CHOCOLATE FLAVOR MALTED MILK (The Borden Co., New York).—It has the following

average composition: Fat, 6.7 percent; protein, 9.7 percent; sucrose, 47.8 percent; other carbohydrates (maltose, dextrin, lactose), 31.0 percent; ash, 2.4 percent; insoluble chocolate solids, 0.4 percent; moisture, 2.0 percent. This product differs from other chocolate malted milks in that the cocoa is cooked.

QUAKER PUFFED WHEAT (The Quaker Oats Co., Chicago).—It is made from whole wheat; twenty-five percent is bran. The minerals are retained. Puffed Wheat with whole milk is approximate in energy value to a dish of hot cooked cereal.

QUAKER OATS (The Quaker Oats Co., Chicago).—Brands: Quick Quaker Oats; Rolled Quaker Oats; Mother's Oats; Quick Mother's Oats. Quaker Oats provides fifty percent more protein than wheat, sixty percent more than wheat flour, more than twice as much as rice; one hundred percent more than cornmeal. It is rich in minerals and vitamin B.

INSTANT POSTUM (Vacuum Cereal Beverage) (Postum Co., Inc., Battle Creek, Mich.).—A beverage made only of whole wheat and bran roasted with a small portion of sugar-cane molasses. It contains no caffeine.

POSTUM CEREAL (Postum Co., Inc., Battle Creek, Mich.).—It is made only of whole wheat and bran roasted with a small portion of sugar-cane molasses. It contains no caffeine.

SAC-A-RIN BRAND OF CANNED VEGETABLES (Kings County Packing Co., Oakland, Calif.).—Brands: California Tomatoes; California Asparagus; California Spinach. These are vegetables packed without added salt or sugar for dietetic purposes. For use when an intake of carbohydrate—particularly sugar—is to be restricted.

SANKA COFFEE (Sanka Coffee Corporation, Brooklyn and Los Angeles).—A blend of South American coffee with Mocha and Java. The caffeine is removed by a process which removes ninety-seven percent or more of the caffeine originally present in the bean (based on 1.1 percent of caffeine). It may be used when other coffee has been forbidden.

MILK PACKED COCOANUT (Franklin Baker) (Franklin Baker Co., Hoboken, N. J.).—The shredded cocoanut is packed in cans without the addition of sugar, the can being filled with cocoanut milk.

FRANKLIN BAKER PREMIUM COCOANUT (Franklin Baker Co., Hoboken, N. J.).—The shredded cocoanut is mixed with added sugar and five percent glycerin and passed through driers.

SOUTHERN STYLE COCOANUT (Franklin Baker) (Franklin Baker Co., Hoboken, N. J.).—Cocoanut meat is passed through an automatic shredding machine, after which the added sugar is mixed with the cocoanut meat, the resultant product being passed through driers. The product is packed in cans in an atmosphere of carbon dioxide.

HELLMANN'S MAYONNAISE (Richard Hellmann, Inc., Long Island City, N. Y.).—It is made from a blend of edible vegetable oils, vinegar, egg yolk, spices and condiments beaten to a stable emulsion.

MINUTE TAPIOCA (Minute Tapioca Co., Inc., Orange, Mass.).—It is made from tapioca flour. The flour is bolted, mixed with water, steam cooked, granulated and dried.

ASSOCIATION OF HAWAIIAN PINEAPPLE CANNERS.—On the basis of an average of representative samples of Hawaiian pineapples there is obtained a value of eighty-eight calories per hundred grams of canned pineapple. There are better sources of a single vitamin, but as an all-around source of vitamins the pineapple takes unusually high rank. Canned pineapple is an article of diet of substantial food value.—(*Jour. A. M. A.*, March 8, 1930, p. 716).

PROPAGANDA FOR REFORM

EPHEDROL WITH ETHYLMORPHINE HYDROCHLORIDE (LILLY) NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that this is a shotgun cough mixture, relying on an opiate for its effect, and

on the vogue of ephedrine for sales appeal. The Council declared Ephedrol with Ethylmorphine Hydrochloride unacceptable for New and Nonofficial Remedies because it is an unscientific mixture marketed under an unacceptable proprietary name with unwarranted therapeutic claims.—(*Jour. A. M. A.*, March 1, 1930, p. 634).

NEW TREATMENTS FOR CANCER.—Hanson reports results closely resembling those described by Coffey and Humber, following the administration of thymus extract. Sokoloff reports similar results following the use of an extract of the suprarenal combined with iron. Charlton announces lytic effects on cancer cells following the administration of an extract of the omentum. The interest of the Coffey-Humber method, in its present stage of investigation, lies primarily in the fact that the available evidence seems to demonstrate a definite effect on cancer tissue as the result of injecting suprarenal extract into the body at points removed from the tumor.—(*Jour. A. M. A.*, March 1, 1930, p. 639).

MEDICAL PUBLICITY BUREAU.—In an article dealing with the subject of this caption that appeared in *THE JOURNAL* December 7, 1929, the statement was made that Dr. William J. Robinson was the principal stockholder in this bureau. After the appearance of the article Doctor Robinson wrote to *The Journal* stating that the use of his name in this connection was without justification. A correction of this statement was published in *The Journal* January 25, 1930, stating that the statement was incorrect. *The Journal* now publishes at Doctor Robinson's request an affidavit from the doctor to the same effect.—(*Jour. A. M. A.*, March 1, 1930, p. 652).

CAUSYTH.—A number of German journals have contained more or less laudatory reports regarding Causyth, but these are not considered to present acceptable evidence for the value of the preparation. According to the advertising, Causyth is a "cyclohexatrienpyridinsulphonacid, derived from Pyrazol, the formula being $C_{12}H_{14}N_4O_6S$." The product has not been considered by the Council on Pharmacy and Chemistry nor has the Mallinckrodt Chemical Works, which exploits it by way of its Canadian branch, "Mallinckrodt Chemical Works Limited of Canada," requested the Council to report on it. Apparently no reports have been published in American medical journals which are confirmatory of the German propaganda. A pharmacologist who has given much attention to the action of salicylates and other drugs used in the treatment of rheumatism reviewed seven of the eight papers which were referred to in an advertising circular. He held the evidence to be unsatisfactory and uncritical and no justification for the extravagant claims of the advertising.—(*Jour. A. M. A.*, March 1, 1930, p. 656).

PNEUMOCOCCUS VACCINES OMITTED FROM N. N. R.—The Council on Pharmacy and Chemistry reports that increasing experience has failed to demonstrate the value of pneumococcus vaccine in the treatment of pneumonia, and the prophylactic value of the vaccine has not been proved conclusively. The Council came to the conclusion that the experience with this vaccine has not afforded acceptable evidence for its therapeutic usefulness and voted to omit it, with the accepted brands, from New and Nonofficial Remedies. In accordance with this action the Council announces the omission of Pneumococcus Vaccine Immunizing (Gilliland Laboratories, Inc.); Pneumococcus Vaccine (Lederle Antitoxin Laboratories); Pneumococcus Vaccine, Prophylactic (Eli Lilly & Co.); Pneumococcus Antigen-Lilly; Pneumococcus Vaccine (National Drug Company); Pneumococcus Vaccine (four types) (Parke, Davis & Co.); Pneumococcus Immunogen (Parke, Davis & Co.); Pneumococcus Vaccine (E. R. Squibb & Sons).—(*Jour. A. M. A.*, March 8, 1930, p. 716).

MODILAC NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that Modilac is the proprietary name under which the Wm. S. Merrell Co. markets a compressed tablet containing milk sugar and some salts, recommended for the "humanizing" of cow's milk to render it suitable for infant feeding. In

1925, the Council held Modilac not to be within the scope of New and Nonofficial Remedies because no medicinal claims were made for it, and included the product in the list of exempted articles. From an examination of the present advertising it appears that medicinal claims are now being made for the product, thus bringing it within the scope of New and Nonofficial Remedies. These claims were found to be unacceptable and, therefore, the Council voted that the exemption of Modilac be rescinded and that it be considered unacceptable for New and Nonofficial remedies because it is an unscientific mixture of official articles marketed under a nondescriptive proprietary name and with unwarranted therapeutic claims.—(*Jour. A. M. A.*, March 8, 1930, p. 716).

JEAN JACQUES LABORATORIES.—For some time one I. Francis Purdy has been exploiting a piece of aphrodisiac quackery through the United States mails. Recently the postal authorities called a halt on the matter and, after a hearing, debarred Purdy's business from the mails. Purdy's trade style was "Jean Jacques Laboratories," operating from 3104 Michigan Avenue, Chicago. Purdy was selling through the mails a medicinal preparation that he called "Oxentric" which was supposed to be a cure for lost sexual vigor and prostatic trouble in men of all ages. The preparation was put up for him by the Bierstedt Suppository Co. of Chicago.—(*Jour. A. M. A.*, March 8, 1930, p. 735).

TOM HAYES.—The Indecent Fraud of Archie T. Hay. Archie T. Hay, who did business from 189 North Clark Street, Chicago, under the trade name "Tom Hayes," has been selling on the mail order plan a salve or ointment called "T. N. T. (Tom's New Treatment)" for cases of "lost manhood." The nostrum sold by Archie T. Hay was prepared for him, according to the government authorities, by Stearns & White, Chicago. The Postmaster General declared the Tom Hayes business a fraud and debarred it from the mails.—(*Jour. A. M. A.*, March 8, 1930, p. 735).

ANNUAL MEETING OF THE COUNCIL ON PHARMACY AND CHEMISTRY.—The Council on Pharmacy and Chemistry held its annual meeting at the Association headquarters March 7th and 8th. Extended consideration was given to the work of the newly established Committee on Foods and the proposed publication of the book, "Accepted Foods." The progress made appeared satisfactory and the work appears to be appreciated by the profession, the public and manufacturers. The Council discussed the status of the streptococcus preparations for the treatment of rheumatic fever made in accordance with the method of J. C. Small: it was the consensus that, while these products are suitable for controlled investigation by qualified experimental workers, propaganda which invites their general use is not justified at this time. The Council decided that the available evidence does not demonstrate the usefulness of puerperal fever streptococcus serum. The Council decided to continue the acceptance of type I antipneumococcic serum for New and Nonofficial Remedies; that type II serum is still in the experimental stage; and that pneumococcic serum preparations representing a mixture of type I and II pneumococcic be considered unacceptable. It was decided that, while adequate clinical evidence for the potency of a liver extract must be required before acceptance, further clinical testing will not be required after a product has been shown to be active and the method of preparation shown to be satisfactory. The Council considered the rules that are to govern the use of the seal to be used by manufacturers to identify products accepted for New and Nonofficial Remedies or for Accepted Foods. The Council approved a proposed study of commercial allergic protein preparations and offered cooperation. The Council considered a proposed manual for the guidance of hospitals to be prepared by a committee appointed by the Council on Medical Education and Hospitals with the cooperation of the Council on Pharmacy and Chemistry. Plans for the consolidation of various committees concerned with anesthesia were discussed.—(*Jour. A. M. A.*, March 22, 1930, p. 874).

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GLASS BALL IMPLANTATION FOLLOWING ENUCLEATION*

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AND

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There is no thought of putting forward anything especially new in this paper, and the points emphasized are so much the same as those embodied in the papers of Greenwood and Ralston before the American Academy of Ophthalmology and Otolaryngology in 1913 and 1921, respectively, that it may be thought we have drawn unduly from these sources. We have no hesitation in admitting our indebtedness to these two contributors, with whose conclusions we substantially agree.

The implantation of a gold or glass ball in Tenon's capsule after enucleation can be performed so easily and the cosmetic result obtained is so excellent that there can be little doubt as to the value of an implantation operation. Yet, it is not uncommon to encounter patients who have suffered a simple enucleation with its resulting lifelong disfigurement, and it is only fair to wonder why this should be. Perhaps the answer lies in the intricate techniques described by various originators of implantation operations, or in insufficient publicity concerning the value of this type of plastic surgery. It has seemed to us at any rate advisable to reiterate the value of glass ball implantation and describe a technique so simple that there can be no excuse for any operator doing a simple enucleation on account of the difficulty of doing an implantation, or unless there is a definite contraindication, such as infection, sympathetic ophthalmia, etc.

The history of enucleation is so interesting as to be worth a brief account of its development. Lange¹ in 1555 performed the first enucleation or extirpation of which there is any record, while Bartisch² in 1583 published the first technique of the operation. This was a dreadful method of removing the globe, by passing a strong needle and thread through the eyeball, putting traction on it and then severing the globe from its orbital

attachments by a sharp knife or spoon, all without anesthesia. It was used only for tumors of the globe and orbit and kindred causes, and needless to say was not often employed. However, it remained as the sole method of enucleation until 1841, when Ferrall³ and Bonnet⁴ gave us the technique now commonly in use in simple enucleation of the globe.

Mules⁵ in 1885 brought forth the method of implantation of glass, gold or silver balls in the sclera after evisceration, but the inflammatory reaction immediately following this operation, together with the possibility of sympathetic ophthalmia, has brought this operation into disrepute. Frost and Lang⁶ in 1886 simultaneously conceived the idea of implanting some solid substance in Tenon's capsule. Frost sutured the superior and inferior recti with the overlying conjunctiva, while a second suture united the internal and external recti and their conjunctiva. Lang's technique differed from this only by including the capsule of Tenon in the sutures. These operators were the pioneers in a method which should be used universally. Since their time many modifications of the idea have been advanced by various operators, such as Verhoeff, Oliver and Sweet, most of which include suturing the muscles in such a way as to make the technique not only difficult to understand but also hard to carry out, as well as being entirely unnecessary.

Beard⁷ in his ophthalmic surgery is rather doubtful about the results of the implantation methods, and says: "Abundant experience has demonstrated that inorganic substances, such as glass or metal, introduced in the capsule of Tenon are generally, sooner or later, eliminated." This has not been our experience.

Greenwood⁸ called especial attention to Tenon's capsule, and pointed out what a well-marked membrane it is, and advocated suturing the capsule over the ball completely and then suturing the muscles over this. He recommended introducing twenty-two mm. glass balls, or as large balls as the cavity would admit, and reported excellent results.

For some years it has been our practice to implant a glass ball in Tenon's capsule whenever the capsule or orbital tissues were in healthy

*Presented before the Indiana Academy of Ophthalmology and Otolaryngology at the French Lick session, December, 1929.

enough condition to permit, and our method has been a combination of the Ferrall and Frost-Lang methods, without any suturing of the muscles. Practically all of our implantations are done under local anesthesia, the only contra-indication to this method being the prohibitive youthfulness of the patient. We give a hypodermic injection of morphine sulphate, grain one-fourth, and hyoscine hydrobromide, grain 1/200, one hour before the operation. In females of small stature the dose of morphine is cut in half. The usual routine administration of six drops of four percent cocaine solution is carried out, and then there is given a ciliary ganglion injection of one percent novocaine solution with adrenalin, usually from four to six cc., and always enough to produce a slight proptosis of the globe. Under this procedure practically no patient has experienced any pain or even realized that an operation has been performed. No undue hemorrhage has been encountered following this technique. The conjunctiva is cut by closely circumscribing the limbus (Fig. I), undermined, and the respective recti tendons severed. The undermining, which separates all the tissues from the globe back to the equator, is done by putting the closed scissors in and opening them (Fig. II), a very satisfactory method which we have not seen generally used by

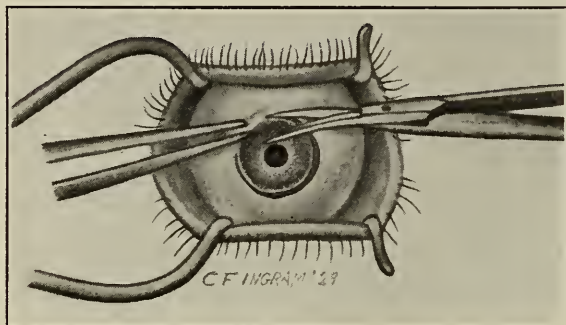


FIGURE I

The incision of the conjunctiva, which should be made as close as possible to the cornea.

others. The internus is cut on the mesial side of the elevating hook, the remaining three severed close to the ball (Fig. III). The internus stump is grasped with small curved hemostats (Fig. IV) to give a firm hold and control of the globe. The globe is then proptosed by depressing the speculum, rotated externally and the nerve cut from the nasal side. The oblique tendons and accompanying tissues are then dissected away close to the sclera and nerve, and a hot saline pack inserted with bayonet forceps to the apex of the orbit, and held in position by firm pressure till all bleeding has ceased. The capsule is then picked up by four mosquito forceps, as illustrated (Fig. V), and it is always surprising to see what a complete, strong, tenacious membrane the shining silver capsule is. With some convenient instrument (Fig. VI) a suitable-sized glass ball, usually sixteen or eighteen mm., is

then placed in the capsule, firmly depressed and held in position by a strabismus hook, which serves not only to keep the ball out of the way while closing the capsule, but helps also to prevent bleeding or oozing behind the ball. The capsule is closed with a purse string suture of either 00 chromic catgut or iron-dyed silk, No. 1 to No. 3 (Fig. V and Fig. VII). The conjunctiva is closed with a horizontally running suture of silk, the edges being left long to facilitate removal (Fig. VIII), and a firm pressure head bandage is applied. From some of our subsequent results we believe this pressure to be a very important factor in securing retention of the ball. The patient is kept in bed for twenty-four hours, allowed up and about thereafter, and after seventy-two hours the pressure bandage is taken off. The conjunctival suture is removed by cutting it centrally and withdrawing the two ends left long at operation. The patient leaves the hospital at this time with only an ordinary eye dressing, is seen occasionally for cleaning purposes, and as a rule is ready for a prosthesis at the end of two weeks.

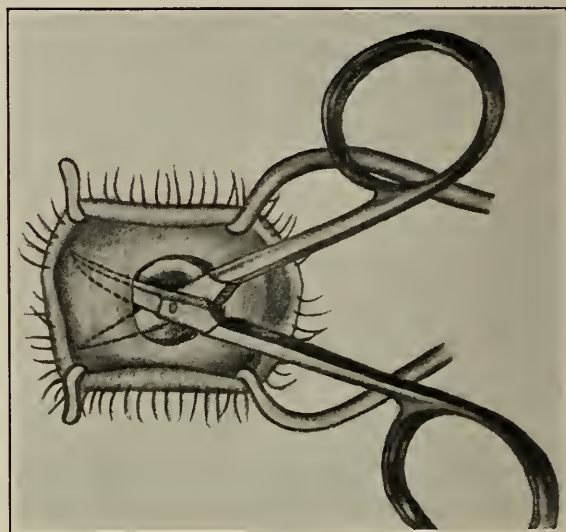


FIGURE II

The separation of the tissues from the globe by a blunt dissection with scissors in reverse action.

In omitting special suture of the muscles, we are influenced by the fact that the muscles do not normally join together over the eye ball, but are attached to the globe a little in advance of the equator. The purse string suture in the capsule brings the muscles sufficiently far forward for them to impart the desired motion to the glass ball, and to unite them over the ball would seem likely to pull the ball so far back in the orbit that much of its value as a support to the prosthesis would be lost.

Many substances have been proposed as suitable for introduction into Tenon's capsule after enucleation, some of which we have tried. Gold balls are very popular and no doubt satisfactory, but they are more expensive than glass, heavier, and

if not of solid gold, are liable to corrode in time. Aluminum balls, especially those with windows in them designed to permit the tissues to penetrate and thereby fix them more firmly, have been found objectionable because they seem to act as irritants, and if it becomes necessary to remove such a ball it is very difficult on account of the fact that the tissues have entered the windows. The basket-like wire balls never appealed to us and were never tried. The same might be said

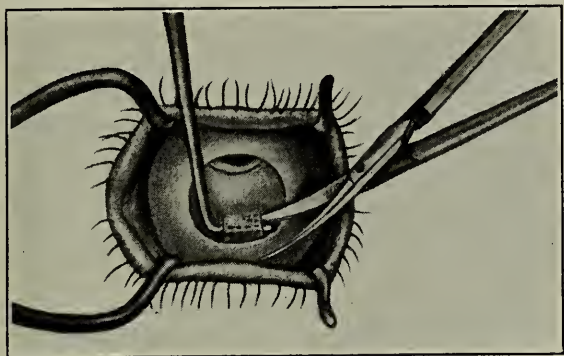


FIGURE III

Cutting the muscles. All are cut close to the ball except the internal rectus.

of the balls carved from cartilage, as suggested by Magitot, and those made of paraffin. Fat has been a popular implant, but our experience with glass balls has been so satisfactory that we have hesitated to change to another material, many other substances being no doubt quite as satisfactory. The latest bid for favor is the ball of bone from which all the organic matter has been burned. These balls are light, porous and probably worthy of trial.

The first implant made by either of us was in 1898. The patient had a greatly shrunken eye and we could not isolate the muscles. Catgut was used to suture the tissues at the four points corresponding to the recti muscles, a method which we think is not satisfactory in that it does not give the best results in covering the ball. In this case a gold ball was implanted, but it became exposed and was removed on the fourth day. We would not now consider implanting any but the smallest ball in such a case. Lack of a cross index of our records has made a search for the early cases difficult, but in 1901 we also had a failure to retain the ball. In this case interrupted silk sutures were employed. It is only fair to include in this report the results in the cases operated on by the technique we now employ and recommend, as we feel sure that early failures were due in part at least to unsatisfactory closing of the deep tissues (capsule and muscles) over the ball.

In regard to the size of the ball, we were influenced by Doctor Greenwood's advice before and during the war to the effect that as large a ball as possible should be used, namely, twenty-four mm. We are satisfied that the use

of this size ball results in great tension being placed on the tissues and sutures covering it, with the consequent greater possibility of expulsion of the ball, and we also feel that this size ball does not give the best cosmetic result. A sixteen to eighteen mm. ball, with a carefully selected "shell eye," and not a "reform" eye, gives us the best cosmetic results. In conversation with a prominent maker of artificial eyes who also supplies the balls for implantation, we were surprised to learn that he advocated smaller balls, even to eight mm. in diameter. He uses "reform" eyes, which, of course, require more room than the shell eyes do.

We have never had a ball become displaced or slip out between the muscles into the orbit. It is conceivable that it might pass backward so far

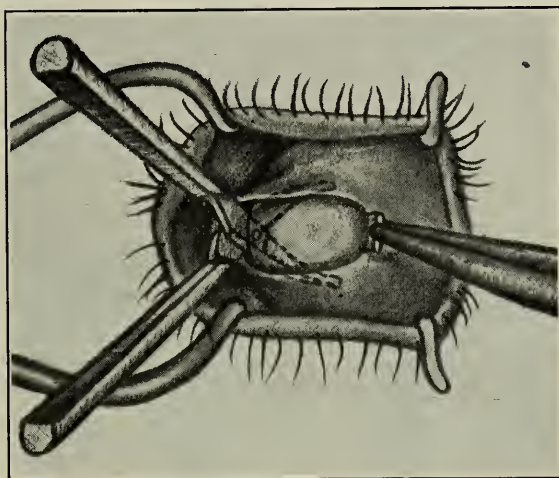


FIGURE IV

The ball is grasped by the stump of the internal rectus and the nerve severed from the nasal side.

as to be of little use in supporting a prosthesis.

Since 1919 we have done seventy-eight implantations in the manner described, as a routine measure, without selection. The ball was expelled in seven cases, all within two weeks of the operation. The following are the brief histories of these cases:

W. V., Jr., aged sixteen, was cut in the right eye by a piece of glass on February 11, 1923. There were wounds in the sclera running more than halfway across the cornea. The anterior chamber was full of blood and vision was reduced to perception of moving objects. A conjunctival flap was put over the cornea, but great reaction followed, with protrusion of the conjunctiva through the palpebral fissure, and the vision fell to questionable light perception. The eye was removed under general anesthesia on February 21st and a twenty mm. glass ball implanted. The capsule was closed with catgut and the conjunctiva with silk. Next day a good deal of oozing was noticed from the wound and some hemorrhage into the tissues of the orbit, which oozing continued for eight days. The whole orbit was swollen with blood, and on March 2nd the swelling

began to subside. On March 3rd, ten days after the operation, the glass ball was seen to be exposed and it was removed. No bleeding followed, but it was a month before the swollen orbital tissues assumed a normal appearance. The boy's clotting time was from five and one-half to six and one-half minutes. Hemostatic serum was given, and apparently had a good effect on the bleeding. In July of the same year a minor operation was done on the socket to enlarge it, and this small incision bled for seven weeks, necessitating repeated transfusions and almost costing the patient his life. His case was evidently one of hemophilia, and the loss of the ball was caused by the excessive and unusual bleeding.

Miss T., aged eighteen, was badly cut around the face in an automobile accident and the left eye was cut half in two. Immediate enucleation and repair of her other cuts was done under ether. A glass ball was implanted, the capsule closed with catgut and the conjunctiva with silk. After her recovery from the anesthetic, she complained of the tightness of the bandage. A zealous interne removed it, with the result that there was a hemorrhage into the capsule, and the pressure



FIGURE V

The glass ball held in a double fixation forceps, which is a suitable instrument for holding it.

on the glass ball caused it to be exposed on the sixth day. The exposure increasing, it was removed on the eighth day.

W. T. was struck in the right eye by a pin when an infant and as the result of this had a blind and painful eye which was removed under ether in April, 1927, he being then fifty-nine years old. The wound was closed with catgut and silk. There was a good deal of swelling about the third day, and we thought it was due to a deep hemorrhage. On the eighth day a small central slough occurred and on the eleventh day the ball was exposed. Thirteen days after the operation it was extruded. Some blood clot was found in the capsule of Tenon, but no sign of infection. It was afterwards learned that the nurse had loosened the bandage by cutting it and this permitted the unusual hemorrhage which probably caused the expulsion of the ball.

L. M., a sixty-year-old negro, had a blind and painful eye following an operation done for glaucoma about a year before we saw him. A hypopyon ulcer was present. The eye was removed under local anesthesia July 20, 1929, and a sixteen mm. glass ball implanted. There was a good deal of oozing and an odor suggesting infection. On July 24th the ball was exposed and was removed. A large clot filled the capsule. It was subsequently

found that the interne to whom the dressing of this case was left did not put a pressure bandage on after the operation, but a pad, held by adhesive.

Mrs. W., aged sixty-two, was seen in April, 1927, with what was apparently hemorrhagic glaucoma in the left eye. She had high blood pressure and albumin and sugar in the urine. The right eye showed small retinal exudates and hemorrhages, and the left eye was inflamed, painful and blind, with a wide pupil, steamy cornea and T. 100 Schiotz. Under gas anesthesia, with a little ether, the left eye was removed on May 4th and an eighteen mm. glass ball implanted. There was a good deal of subconjunctival hemorrhage and secretion and a small central slough developed on the eighth day, exposing the ball, which came away on the dressing on the eighteenth day. The patient died in September. It was a mistake to have attempted an implant on such a poor subject.

C. M., aged twenty-two, was cut in and around the right eye June 25, 1927. Enucleation with implantation of a twenty mm. ball was done on the 29th, silk being used for both capsule and

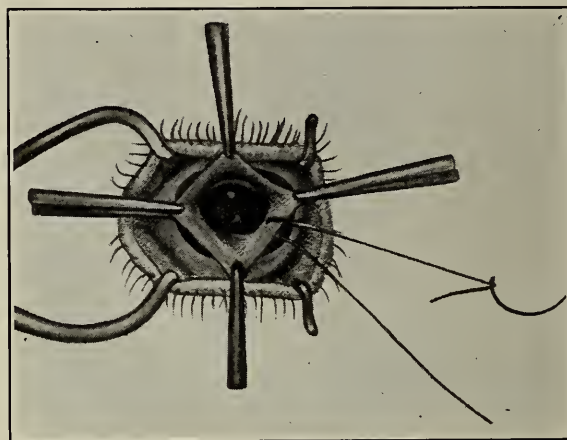


FIGURE VI

The capsule of Tenon is held open by forceps. The ball has been inserted and a continuous purse-string suture is being made.

conjunctiva. The skin wounds had been repaired, but the stitches were removed and the wounds resewn. They did not heal well, and on July 7th (the eighth day) the capsular wound gaped, and, though it was closed by suture, it did not unite and the ball was lost on July 10th, eleven days after its insertion.

S. H., aged fifty-two, was cut in the right eye by the glass from a windshield, and the eye was removed under ether the day after the accident, August 21, 1926. There was a good deal of reaction, but the wound seemed to have closed till nine days after the operation, when it suddenly opened, exposing the ball, which came out the next day.

This seems the appropriate place to express our conviction that the operation is best done under local anesthesia. The addition of adrenalin decidedly lessens the primary bleeding, which is

also discouraged by the calm mental attitude of the patient under the influence of morphine and hyoscine, and one escapes the excited struggles of a patient under ether, with the increased congestion of the tissues of the head and neck and their greater vascularity. Postoperative vomiting, with the associated congestion of the orbital tissues, is also avoided. A study of our failures leads us to conclude that the effective control and avoidance of hemorrhage is a very important factor in securing a successful result in this operation.

If the ball is expelled or removed for any reason, nothing is lost compared to what the result would have been if no attempt at an implant had been made. Indeed Feingold contended that if the cut ends of the tendons were joined by suture, the cosmetic result, and especially the movement of the prosthesis, would be as good as could be attained by an implant, but we do not agree with this.

We have deliberately removed the ball in four cases, as follows:

Miss B. was hurt in an automobile accident, the left eye being cut across the cornea. After

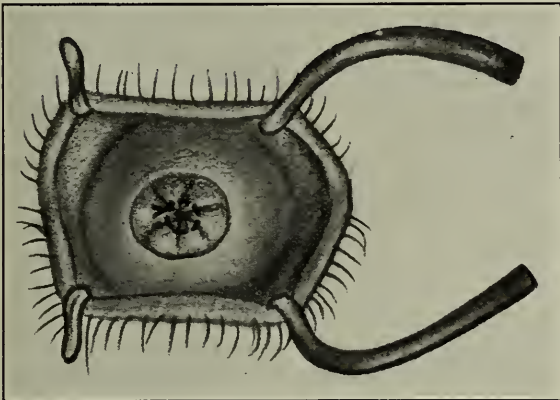


FIGURE VII

The purse-string suture is tied.

two weeks of observation and conservative treatment the eye was removed and a glass ball inserted in Tenon's capsule. The socket healed normally and she left the hospital. Two weeks from the day of the enucleation sympathetic ophthalmia developed in the other eye. It was decided to remove the glass ball to avoid any possible irritation from that source, and this was done through a free incision of the overlying orbital tissues. The removal of the ball had no effect on the course of the sympathetic inflammation.

C. C. H. had a partly shrunken eye following an unsuccessful cataract extraction. This was removed and a glass ball implanted. There was a great deal of reaction and a small slough separated from the line of the wound on the eighth day, exposing about eight or ten mm. of the ball. It was explained to the patient that the ball probably could be retained by suturing, but as it would have prolonged his stay away from home, he de-

cided to have it removed, which was done, and the socket promptly healed.

J. M. was seen in 1918, then aged thirty. A year and a half before he had been struck in the left eye by a nail. He was treated, though the sight was lost, and he made a slow partial recovery. The eye was subject to attacks of inflammation, and, when examined, the right eye was sensitive to light. Enucleation was advised. The man was not seen again for four years, when he showed a marked scleral staphyloma and was having attacks of pain and inflammation, though free from trouble at that time. The left eye was removed in September, 1922, and a twenty mm. glass ball implanted. The capsule was closed with catgut and the conjunctiva with silk. In June, 1929, he reappeared, complaining that the right eye had felt weak and sandy for several days, and, when he tried to use it for far or near, it would close. The vision was 20/20 and J-III, and except for a palpebral conjunctivitis the eye was normal. The left socket was normal, well filled by the implanted glass ball, and was slightly tender on pressure. An artificial eye never had been worn, but the socket was not inflamed. Rather

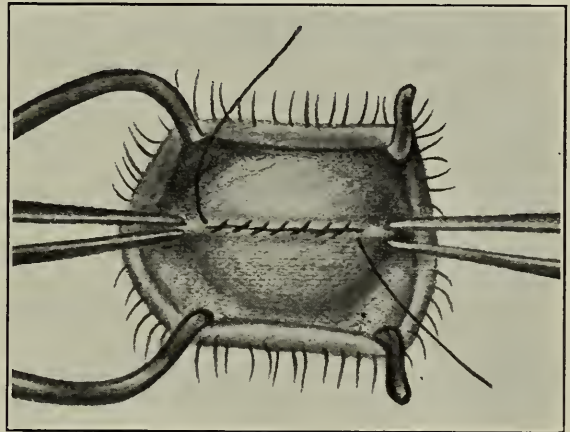


FIGURE VIII

The conjunctiva is closed with a continuous silk suture.

at the patient's suggestion and for lack of anything else to do, the ball was removed. The immediate effect on the fellow eye was good, but after a few days, he again began to complain. When last seen in July 29, 1929, he was having spells with his left eye and he had to stop and rest it by closing. The eye was still normal, vision 15/30 and J-3. The history is given in some detail, as we finally considered it a neurosis and that the glass ball had nothing to do with the symptoms.

A somewhat similar case can be mentioned here briefly. A young man began to have pain in the socket several years after a successful implant. The pain was severe, but there was no sign of inflammation or infection and there was no tenderness. The pain was confined to the socket and, failing to find any cause, the ball was removed, with immediate relief of the symptoms.

It was amazing to see how firmly the ball was held by the covering of capsule and conjunctiva

in these cases, and it was only by considerable effort that the ball finally was pried out through a large capsular opening. One ball is exhibited, removed from J. M. after seven years, and shows numerous intertwining striæ on its surface, which must be the crevices to which the capsular tissue was attached, much as ivy creepers are imbedded in the niches of the wall to which it clings. Our experience in these cases leads us to believe that one need not be much concerned over the possibility of late expulsion of the implant.

It is generally felt that when a ball is exposed it is ultimately lost. In the following case we succeeded in retaining it by suturing.

E. M. H. was seen November 28, 1925, three months after the removal of a magnetic foreign body from the right eye. The eye was soft and showed all the signs of iridocyclitis, including reduction of tension, and was removed November 30th with implantation of a glass ball and suture by catgut and silk. There was a good deal of reaction and finally a small slough formed on the center of the wound, which was removed on December 14th. On December 19th the opening had not increased in size and was perfectly clean. The edges of the gap were denuded and it was closed by one double silk stitch, which closed the tissues over the ball. On removing the stitch after eight days a small gap remained. On January 1st this was freshened at the edges and closed with a mattress suture passed through small silver suture plates on each side of the wound. This stitch was left for one week, and when removed the wound was found completely closed over the ball, and has remained so.

In another exactly similar case we felt that it would have been retained by the same procedure, but the patient was just ready to go home and when it was left to him, he decided he would rather let the ball be removed than prolong his stay in the hospital in an effort to retain it. The case is detailed above. (Mr. C. C. H.)

For a time chromic catgut was used exclusively in the capsule, but a good deal of central wound reaction was encountered, resulting sometimes in a good-sized slough, which may have resulted in the loss of the ball in one case. We do not know if the chemical absorption of the catgut is responsible for this, but it is possible, and might be a reason for employing silk. An objection to silk is that it often continues to work out of the tissues, which is annoying. This is especially apt to occur if the complicated method of suturing, sometimes advised, is followed. This occurred in two cases, as follows:

Mrs. S. was injured by having the left eye cut with glass in 1900. The eye healed with a vision of 15/40. In 1905 the retina became detached, but gave no special trouble, other than with vision, till 1921, when secondary glaucoma developed and the eye became red, painful, besides being blind. It was removed on July 14,

1921, and a glass ball implanted. Besides the purse-string suture, additional sutures of silk were used to approximate the ends of the muscles as advised by Greenwood. The socket healed and the ball remained with an excellent cosmetic result, but particles of the silk worked out and were removed from time to time till December 1st, when the last was removed, nearly five months after the operation.

A somewhat similar result was noted in Mr. McL., whose eye was removed on July 26, 1929, following an injury. Silk was used for both the superficial and deep sutures. On October 7th the deep suture had worked through the conjunctiva and was removed.

It has been our impression that much orbital edema and reaction has been induced by attempting to implant as large a ball as the cavity will hold, and for more than a year we have been implanting balls of a diameter of eighteen mm. or less with much less reaction, equally as good cosmetic results, and without the loss of a ball. We have not been deterred from implantation by the age of the patient, intraocular tumor or intercurrent general disease. We note that the elderly patient is often more concerned over the cosmetic result than the young one, and there can be no harm in attempting to prevent disfigurement at any period of life. Nineteen of our cases who obtained excellent results were over sixty years of age. Three cases showed intraocular tumor on pathological examination, one patient dying from abdominal metastasis after eighteen months, but without orbital recurrence, the other two being all right after eighteen and eight months, respectively. We hesitated at first to make an implant in cases of known intraocular tumor, but since we have not had a local recurrence of the growth after enucleation in any case of intraocular tumor except glioma, we considered that it was permissible to use the implant in such cases.

One true case of sympathetic ophthalmia has been seen in our series of cases and in that case the ophthalmia developed two weeks after the operation. We would not do an implant in the presence of a sympathetic ophthalmia, as any cause of irritation in the neighborhood of the exciting eye might be held responsible for an unfavorable termination of the case. At any rate we might invite criticism by such a course.

Late Implantation. In spite of the attention which Webster Fox's paper on this subject attracted, the possibility of a late implantation does not seem to be appreciated generally. We have one especially gratifying case to report in this connection whose interesting features warrant relating the circumstances in some detail.

Miss L. had heterochromia iridis, the right being the affected (lighter) eye. In due time she developed heterochromic cyclitis, with cataract and glaucoma. She was a maiden lady of prominent social position and blessed with worldly goods,

and was both anxious and financially able to have everything possible done for her vision and for her appearance. She was seen in consultation by Dr. Hiram Woods, who grasped the situation so completely that he urged that everything be done to preserve her eye because the disfigurement of an artificial eye would be a heavy cross to her. Other consultants failed to be so impressed and the eye eventually was removed in 1918. In 1919, when I returned from the army, I found this lady practically a hermit. She rarely went out, and then only when heavily veiled. The implantation of an eighteen mm. ball through an incision in the upper and outer angle of the orbit was successful, and she now wears an artificial eye that is at least not a disfigurement, and she has resumed her social life and goes everywhere. Upon the occasion of a slight injury to her head a snap diagnosis of intracranial injury was made because the right eye did not move as freely as the left and the pupil was inactive.

The practice, as we have seen it recently in some of the large European clinics, is to do a simple enucleation, with possibly the closure of the conjunctiva by one suture, and often no closure at all. While the desired object of the implant is not always attained perfectly, we are satisfied that the average result is vastly better than without it, and such a method will often banish the ghastly, staring, immovable objects that advertise rather than disguise the affliction of the unfortunate sufferer.

CONCLUSIONS

(1) Glass ball implantation should be employed after all enucleations in which it is not contraindicated definitely and positively.

(2) Muscular sutures are unnecessary to insure retention of the implant, as a purse-string capsular suture is sufficient.

(3) Glass balls, sixteen-eighteen mm. in diameter, or less in smaller individuals, give excellent post-operative and cosmetic results.

(4) A pressure bandage should be maintained for seventy-two hours and may then be dispensed with.

(5) The age of the patient is no contraindication to implantation.

(6) Local anesthesia combined with morphine and hyosin hypodermatically is the preferable method.

DISCUSSION

W. F. HUGHES, M.D. (Indianapolis): I have been doing the implantation operation for a number of years, and exempting no class of patients until a few years ago. About five years ago a patient appeared at the office with absolute glaucoma in one eye and subacute chronic glaucoma in the other. I operated the best eye by trephine, and the other eye was so far gone that I did an enucleation, and later implanted a glass ball of moderate size. The appearance was good, the

immediate results were good, but between four and five weeks later the patient appeared with an acute inflammation in that eye. I removed the glass ball and found there was a dense, hard, crystal substance around it which I had considerable difficulty in removing. Examination of the tissue showed a sarcoma. Subsequently he was given x-ray treatment, following which he has recovered completely. That has been five or six years ago and the patient has had no sign of recurrent sarcoma. But that is an example of how we may go along for years inserting these glass balls without any trouble, and then have something like that happen.

JOSEPH D. HEITGER, M.D. (Louisville, Kentucky): I have tried the use of the ox-bone ball, but the results have not been as good as expected, although European operators seem to have gotten pretty good results. I saw some patients in European clinics that had worn bone implants for two or three years and they seemed to be all right. I suppose the difficulty encountered by me was that there was something in the balls that did not sterilize. In one of my cases the eye became infected. The balls were boiled and turned out against a flame and kept at white heat for some time, but for some reason I had an infection two or three weeks afterward.

As Doctor Hughes says, we may go along for a long time and then if we get one case that goes bad it puts us on our guard. Following the work of Elschnig, Allan Wood, and Arnold Knapp in giving these patients a skin test for uveal pigment, I think probably that is one way we may avoid the complication of sympathetic ophthalmia.

Doctor Benedict, of the Mayo Clinic, told me a few years ago that in two cases that came to them with malignancy developed they tried fat implantation. In one case they were able to control it, and in the other they were not. I think these things happen in operations that are done so frequently, and it seems to me they should not bother us. We get fifteen or twenty good results to one malignancy, and, after all, we do not know anything about malignancy anyway.

A. E. BULSON, M.D. (Fort Wayne): First, I wish to disabuse Doctor Ellett's mind concerning the size of ball that Doctor Greenwood uses at the present time. After he presented his first paper I procured some of the twenty-to-twenty-four mm. balls as recommended. Some of the large balls worked well and some did not, but when I saw Doctor Greenwood again he told me he then was recommending balls sixteen to eighteen mm. in diameter. At that time he told me about the pressure bandage, which he leaves on for two or three days, and which I since have found very important.

Concerning the control of the hemorrhage, I use mosquito hemostats, and after I have freed the tissues around the eye ball I grasp the tissue

at the base of the eyeball, including vessels and optic nerve, and excise the eyeball above the hemostat, thus avoiding hemorrhage into the socket. The hemostat is left on for a few minutes, then removed, and seldom is there anything but a dry field remaining.

I also desire to emphasize the necessity of a properly fitting artificial eye. I take sufficient time to select an artificial eye that not only will match the good eye well in color, but also give a lifelike appearance. I prefer an eye just a trifle closed as compared with the other eye, inasmuch as it overcomes a tendency to a staring look and there is more movement. A lead-free glass ball should be selected as a glass that is not lead-free undergoes certain chemical changes in the socket. Another thing is to see that these glass balls do not leak. Some of them have tiny holes in them. I even believe that in many cases a ball smaller than sixteen to eighteen mm. will give better results, more movement and more lifelike appearance.

I am pleased to hear Doctor Ellett say that he does not stitch the muscles and yet gets good results. I always have stitched the muscles, but it is a tedious operation, and when a large ball is used it is a difficult procedure. With a small ball it is much easier, but hereafter I shall not stitch the muscles.

Regarding extrusion, I think the larger the ball the more likely this is to occur. I had a woman who wore a ball for three years after it was showing, but finally the eye became a little bit irritated and the glass ball was taken out.

I want to emphasize what has been said concerning bone balls. At the St. Louis session of the Academy, where someone showed bone implants, I thought it was quite an idea and gave an order for four or five of the bone balls. Later I learned to recognize the danger of infection, but in addition to that the difficulty in removing the implant if necessary at a later date.

I want to thank Doctor Ellett for his splendid paper and for the many instructive points concerning the subject.

B. D. RAVDIN, M.D. (Evansville): I would like to know whether Doctor Ellett has had any experience with explosion of these glass balls. Some men advocate the gold ball, the reason being that the glass balls may explode. Personally I have never seen such a complication, but such cases have been reported.

C. P. CLARK, M.D. (Indianapolis): The enucleation of the eye, from the standpoint of surgery, is destructive surgery, and the cosmetic result is as much a part of the complaint as anything else. Therefore, I think we should consider the appearance of the patient before we decide to enucleate.

In regard to the explosion of glass balls, while

I was resident physician in Wills Eye Hospital, I assisted in getting glass out of an orbit. A man had a glass ball implanted and, getting into a fight, the glass ball was broken. We could not push it out, and it was no easy job. I made up my mind then that I never would implant a glass ball. Recently Dr. Maxwell Langdon has reported two cases of explosion. Both gold balls and glass balls were used at the Wills, but I rather favor the gold balls. The size used was never over sixteen mm. unless in a child.

As to bleeding after the enucleation, recently I had an enucleation in which I tried this method. It is not original with me by any means. I used a Thompson snare looped around the ball, and then an energizing electric current, and in that case there was no bleeding.

HUGH A. KUHN, M.D. (Hammond): I want to thank Doctor Ellett for presenting his paper. Like Doctor Heitger and Doctor Bulson, I am not enthusiastic about bone balls. I had the misfortune to remove one of these yesterday.

I had a patient who had an enucleation twenty years ago and an implant of paraffine. Nobody but the medical examiner knew it was an artificial eye. I put a gold ball in, and it stayed a week, so I came down here a little bit dissatisfied with that procedure.

Recently on a visit to an eye clinic in a neighboring state I saw a physician ready to do an enucleation. He had four glass balls sterilized. The first one dropped as it was being put in the sterilizer; the second was filled with water; the third one dropped while he was manipulating it, and the fourth one was peculiar and he could not get it into the socket. He then sat down and whittled out a piece of cartilage and left that *in situ*.

ROBERT J. MASTERS, M.D. (Indianapolis): Recently in Philadelphia I saw Doctor Peter and Doctor Spaeth working together, using gold balls in doing implant operations, and they picked up the four rectus muscles with one suture to Tenon's capsule.

I hope the members will pardon me for bringing up something that is possibly rather primitive in its nature, but I would like to know how to inject the ciliary ganglion. I ask that because I have seen men here and there who inject the ciliary ganglion and then have to put the patient under gas in order to cut the optic nerve.

E. C. ELLETT, M.D. (closing): I thank the gentlemen very much for the interest they have shown, and I am sure I have received very good help from the points brought out.

With reference to Doctor Hughes' patient, I never had such an unfortunate accident happen, so I do not know anything about it.

The bone balls seemed to me to have the objection that Doctor Heitger and Doctor Bulson mentioned, that they would be difficult to remove if that were necessary. I have not used them.

I have not had a ball explode or break. I have had artificial eyes explode in the socket, and I remember Doctor Fox read a paper in which he advocated the gold ball because of an experience with a broken glass ball, but I do not remember whether the glass ball exploded or was broken by injury. I suppose that is one disadvantage of the glass ball and an argument in favor of the gold ball.

In regard to leaking, my balls are boiled and then left in the boiling sterile solution on the table, and I always look at them. I have seen only one or two leak, but, of course, if they do leak you will be in trouble if you implant them. But it is easy to detect a leak.

It seems to me that the patient who has had an implantation is not so apt to have the discharge we see so often in sockets that have had an ordinary enucleation. We have had a good deal of trouble with that—the eyes have to be taken out and washed a half dozen times a day. The eyes should be changed often—they get rough if they are not changed. I think a good deal of that can be helped by proper attention to the eye.

In ciliary ganglion injection I go through the conjunctiva. If you go down and out, go back until you are well back of the eyeball, probably thirty or thirty-five mm., I think you will have no trouble. Of course, some people will complain anyway.

I would not see the advantage of the cautery in this operation because there certainly would be some tissue slough that ought to come out, and the implant would close the tissues over it.

I have not tried Doctor Bulson's method, but I will, since it does not mean buying another instrument.

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SUBACUTE BACTERIAL ENDOCARDITIS*

Some Clinical Observations

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It is said that health is life's greatest asset. To preserve health is to perpetuate happiness and success. All methods employed to prevent heart disease are important contributing factors in the preservation of health. By increasing our knowledge on the various phases of heart disease, we may be able to render a greater prevention work, particularly do I believe that we should be better informed concerning the role of infection in heart

disease. For this reason I have selected one type of infectious heart disease for my subject, namely subacute bacterial endocarditis. My remarks will be based on a review of the literature and some clinical observations on twenty-four of my cases.

The first record Blumer was able to find was an article by W. Sinhouse Kirkes in 1852 entitled "On Some of the Principal Effects Resulting from the Detachment of Fibrinous Deposits from the Interior of the Heart and Their Mixture with the Circulating Blood." In 1868, Samuel Wilks in an article entitled "Pyemia as a Result of Endocarditis" substantiated the diagnosis by autopsy in a case of six months' duration. He also called attention to the fact that this condition had been given only very little consideration in medical books. About this time Quinquad, Lanceveaux and Ropin also reported cases. In 1885,

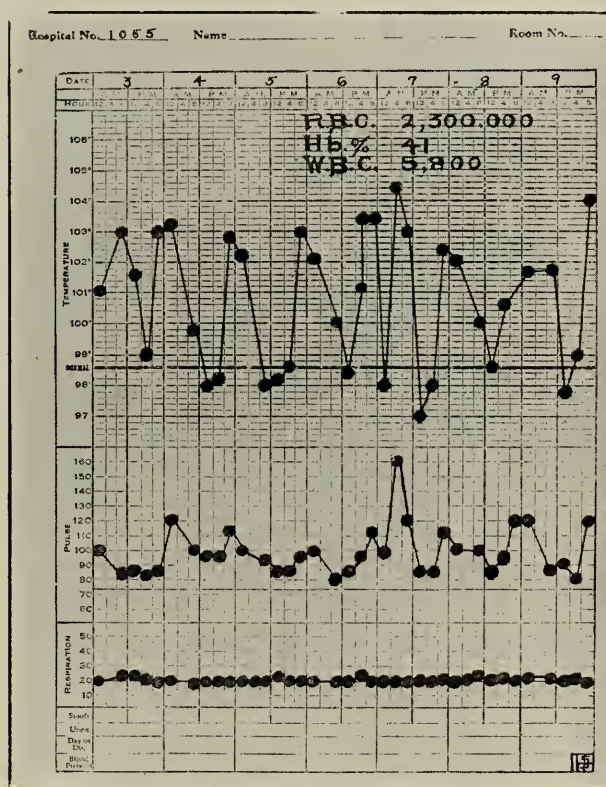


FIGURE 1—Typical chart during embolic period.

Sir William Osler, in his Gulstonian Lectures, first called attention to the disease in its varied forms. The peculiar skin lesions which have received the name of Osler's sign were also noted between 1873 and 1900 by different observers. In 1899, Mabel Austin described the first case due to bacillus influenza. Since 1910 much new knowledge has been acquired concerning this remarkable disease, and at the present time the literature is extensive. Since the beginning of the present century the most important contributions have been by Koeniger, Lohlein, Libman, Coombs, Clawson, Blumer, Romberg, Osler, White, Christian, Thayer, Schottmueller, Rosenau, Horder, Lenhartz, Vacques, Riesman, Weber, Kostner, and many

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others. Libman and his co-workers have done such excellent work in this field that the condition is often referred to in medical literature as Libman's disease. Blumer's work, published in *Medicine*, Volume 2, 1923, and Thayer's review in *Johns Hopkins Report*, Volume 22, 1926, should be read by every physician.

An exact agreement as to just what is meant by subacute bacterial endocarditis has not been reached by all authorities. Under this term, Libman has included such conditions as chronic ulcerative endocarditis, chronic malignant endocarditis, vegetative endocarditis, endocarditis lenta, chronic septic endocarditis, and does not include cases dying before three months. He classifies endocarditis as rheumatic, syphilitic and bacterial. He



FIGURE II.—Vegetations on aortic valves. (Courtesy of Dr. William Antopol.)

subdivides the bacterial into acute, lasting up to six weeks, and subacute, lasting from four to eighteen months. Blumer classifies all protracted cases as subacute bacterial endocarditis. While it is possible for any bacteria to produce subacute bacterial endocarditis, it has been found that the streptococcus viridans is responsible for ninety-five percent; the influenza bacillus being responsible for about five percent, with an occasional case due to gonococcus, pneumococcus, staphylococcus, etc. In a recent issue of the *American Heart Journal*, a case due to the bacillus melitensis was reported. Unfortunately, there are few accurate figures covering the frequency of subacute bacterial endocarditis as compared with the other three common infectious types, namely, rheumatic, luetic and acute bacterial. Libman states that three-tenths

percent of all patients having chronic valvular disease die with this malady. Horder thinks that one in every two hundred ward patients have this condition, or about twelve percent of all chronic forms of infectious endocarditis fall under this classification. Lenhartz believes that this disease is responsible for forty-two percent of all prolonged infectious cases of endocarditis. Sir Thomas Lewis states that this disease is not uncommon, but often overlooked, and as a clinical condition is not known to the profession generally.

The recognition of subacute bacterial endocarditis in the early or pre-embolic stage is seldom easy, usually difficult, and often impossible. In my group of cases the first symptoms were fatigue and irritability, insidious in their onset, sooner or later associated with anorexia and headache. These were followed with dyspnea on exertion, increasing exhaustion, chilly sensations, night sweats, insomnia, gastric and intestinal irritation, and afternoon temperature (99 to 100). In some the temperature was continuous with fairly regular morning remissions and evening exacerbations. In a few the fever was essentially intermittent. In a female patient, aged nineteen, the first symptom was menorrhagia, and the patient was being observed in the gynecological section of the hospital. In another female patient, aged twenty-six, the first symptom was amenorrhea. Three patients complained only of painful joints, plus fatigue and exhaustion. Anemia was an important finding the first few weeks. Red cell count averaged around 3,000,000 to 4,000,000, with a hemoglobin around seventy to eighty percent. The white cell count was of little value, ranging from 3,500 to 14,500 and averaging around 10,000, with no change in the differential count. The urine, including kidney function and blood chemistry, was usually normal in the pre-embolic period. General physical examination was essentially negative, with the exception of an old valvular heart lesion, which was found in ninety percent of my twenty-four cases. In sixty percent of my patients, I got a history of antecedent rheumatism, acute rheumatic fever, chorea, tonsillitis, scarlet fever, growing pains, etc. One case had congenital heart disease. I was able to associate a definite relation between oral sepsis, especially following the extraction of teeth with apical abscesses, as the beginning of symptoms in four of my cases. Also the relation between acute respiratory infections, tonsillitis, sinusitis, otitis media, and suppurative lesions in the abdomen and pelvis was observed as an important factor in the beginning of symptoms. While any pre-existing infection may be responsible in grafting an infection on old damaged valves, my cases and those of others show the above conditions to be the most important. The ages varied from seventeen to sixty-nine, and more than sixty percent were between twenty and forty, showing that this is a disease which usually occurs during the period of greatest incidence of

valvular heart disease. The youngest case recorded in the literature was five years of age.

The latent or embolic period showed the above symptoms usually increased with a definite progressive anemia (a few cases showing as low as 1,500,000 red blood cells with a hemoglobin of twenty-five to thirty percent, also changes in the size and shape of the red cells), the characteristic color (*café au lait*) of the skin, plus the results of emboli. These various embolic manifestations masquerade as cerebral, pulmonary, gastrointestinal, kidney, purpura hemorrhagica, splenic anemia, and other diseases, which is responsible for the many errors in diagnosis. These errors in diagnosis and the importance of considering the heart as a factor in the differential diagnosis when these various embolic manifestations present themselves are the points which I wish to stress, as time will not permit me to discuss in detail the many phases observed in these cases. The following case reports will demonstrate more clearly my points, also show the many unnecessary and often expensive methods of investigation to which these mistaken diagnoses lead:

Case No. 1.—Girl, aged twenty-four, who had a continuous fever associated with fatigue, joint and muscle pains, for a period of one month. Diagnosis was typhoid fever, which is a common diagnosis in this class of patients. This is a very safe diagnosis because the treatment employed usually is based on commonsense procedures, such as rest, diet, etc. At the end of the eighth week of this patient's illness she had an acute pain in her right chest, which was associated with cough, increased temperature elevation and accelerated heart action. Examination revealed a pleuritic friction rub and within a short time this was followed by a pleural effusion. The diagnosis of typhoid fever was then changed to pulmonary tuberculosis. This again is a common diagnosis made in subacute bacterial endocarditis, and in this case did not add discomfort to the patient, but added the expense of having another consultant. Three weeks later this patient developed an acute pain in the left eye with the usual signs of an acute iritis. She had an examination by an ophthalmologist, who thought sinusitis might be responsible for her eye symptoms, and they were advised to have a nose and throat physician investigate this condition. He did a submucous and radical drainage of both antra. Two weeks later the nurse observed blood in the patient's urine. This finding was followed by cystoscopic examinations to determine the cause of her hematuria. Four weeks later the patient developed an acute abdominal pain, associated with nausea, vomiting, rigidity of the abdominal muscles, and other symptoms which pointed to an acute surgical abdomen. At this time a surgeon was called and as he did not like the general condition of the patient, asked for further medical consultation. After obtaining the above history;

an additional history of three attacks of acute rheumatic fever; observing the patient's marked pallor; finding skin and mucous membrane petechia; painful erythematous nodes in fingers and toes; an enlarged spleen; definite structural heart changes, such as increase in size and mitral insufficiency, I considered the possibility of subacute bacterial endocarditis. Blood culture showed streptococcus viridans on the sixth day. Autopsy verified the diagnosis of subacute bacterial endocarditis, showing vegetations on the mitral valve.

Case No. 2.—Girl, aged nineteen, single, who had a left hemiplegia of three weeks' duration, was admitted to the hospital. Attempting to establish a diagnosis of syphilis as a factor responsible for this patient's hemiplegia, two spinal punctures and several blood Wassermanns were made prior to her admission to the hospital. History obtained from the mother showed that this patient had carried a daily temperature elevation, associated with fatigue and exhaustion, for three months prior to her cerebral accident. On examination, a pallor and curious pigmentation of the skin, especially of the face, was observed; also petechia (white centered) on the conjunctiva and upper portion of the chest. Further examination showed valvular heart disease, clubbing of the fingers, tender nodes in fingers and toes (Osler's nodes), and a tender, enlarged spleen. (The spleen could be palpated in 57 percent of my cases.) Blood was found in the urine, which later proved to be the result of focal embolic glomerulonephritis, or so-called flea-bitten kidney, a condition frequently found in these cases. Blood culture showed streptococcus viridans and a diagnosis of subacute bacterial endocarditis was made, which was verified at autopsy.

Case No. 3.—Man, aged twenty-four, admitted to the hospital with a complaint of acute abdominal pain, associated with nausea and vomiting. He had a temperature of 102, and blood examination showed a leukocyte count of 12,600, Poly. eighty-five percent, small lymphocytes twelve percent, large lymphocytes three percent. Examination revealed a tender, rigid abdomen and laparotomy was advised. On observing the patient's marked pallor and rapid heart, the surgeon in charge called medical consultation. In addition to the symptoms described above, I found a mitral valvular lesion, enlarged spleen, petechia in conjunctiva, left retinal hemorrhage and blood in the urine. These findings, plus a history of prolonged fever and sweats, with occasional chills, led me to consider subacute bacterial endocarditis as being responsible for this patient's symptoms of toxemia; and that his acute abdominal symptoms, which later subsided, were embolic in origin. Blood culture returned positive for streptococcus viridans. Patient's anemia was progressive and rapid, and there was intermittent hematuria. After weeks of continuous fever and chills he developed a sudden, severe pain in left leg, which was followed by

discoloration of foot and lower third of leg. Patient died two days after the development of this condition, apparently from sepsis. No autopsy obtained.

Case No. 4—Man, aged thirty-eight, showing a history of fever of five months' duration. The points of interest revealed on examination were: a very large spleen, extending downward into the pelvis and to the right of the mid-abdominal line; red blood count 3,500,000, hemoglobin seventy percent, white blood count 3,500 to 6,000, Poly. fourteen percent, small lymphocyte eighty-four percent, and large lymphocyte two percent. One month prior to my examination an exploratory laparotomy had been made. It was proved later that this patient had subacute bacterial endocarditis of the splenomegalic type. Similar cases have been reported by West, Osler, Riesman and other authorities, and they call attention to the fact that this type may simulate leukemia, acute mononucleosis, and various forms of splenic anemia.

Differential Diagnosis: The above cases and others which I should like to discuss will stress my point in considering the heart as a possible factor when these various clinical manifestations present themselves. These cases also bring out the numerous conditions one must consider from the standpoint of a differential diagnosis; the most important, as enumerated by Blumer, are: influenza, malaria, typhoid and Malta fever, pulmonary and renal tuberculosis, thrombophlebitis, purpura hemorrhagica, pernicious anemia, splenic anemia, recurrent rheumatic endocarditis, infectious arthritis, pyelitis, cholecystitis, obscure pus collections, such as osteomyelitis, empyema, liver abscess, etc. Our attention should be called especially to the close simulation of active rheumatic endocarditis and subacute bacterial endocarditis. It has been shown by Clawson that a positive blood culture of streptococcus viridans can be obtained from both types, and one frequently finds the so-called rheumatic skin nodules in patients with rheumatic endocarditis. Clawson states that the important factor in the differential diagnosis is the embolic manifestation observed in subacute bacterial endocarditis. Under the embolic stage, one must consider the symptoms arising from vascular embolic phenomena, especially of the brain, lungs, spleen, kidneys and abdomen. The above statements explain why subacute bacterial endocarditis is often overlooked, since it masquerades in many guises in which symptoms pointing to the heart may be slight or entirely lacking. One is ready to believe with Osler that the protean character of the malady, the latency of the cardiac symptoms, and the close simulation of other disorders combine to render the detection of subacute bacterial endocarditis peculiarly difficult.

Prognosis: The prognosis of this disease is usually very unfavorable. Libman thinks that about three in each one hundred patients recover. Even in cases where constant and varied attempts at

therapy have been made, it is nearly one hundred percent fatal. Recovery is reported rarely and then we must assume that it has been spontaneous for there is no evidence in these cases that the particular therapeutic measures employed in any way effected the course of the disease. Twenty-two of my cases are dead and the other two are in a very serious condition.

Treatment: Many and varied forms of therapy have been employed: arsenical preparations, vaccine, serums, chemotherapy, cauterization at the point of election, transfusions, etc. White reports a case where one massive transfusion (1,800 cc.) and five smaller ones (500 cc. each) were given without any appreciable effect on the course of the disease. The donors had been vaccinated with a killed culture of streptococcus viridans obtained

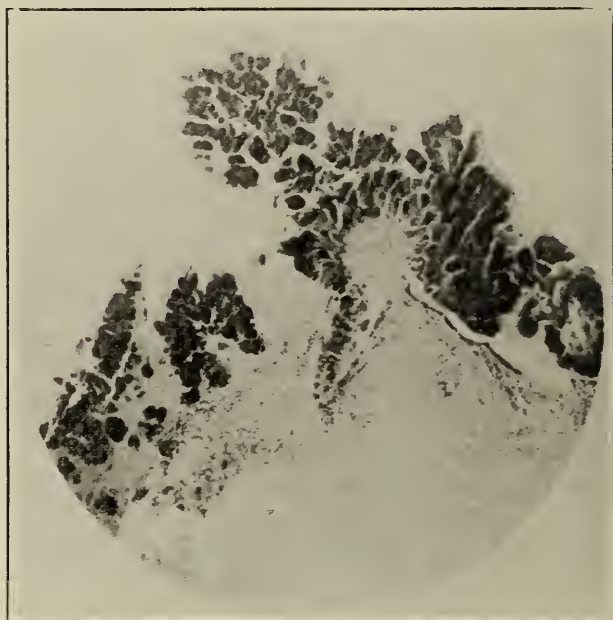


FIGURE III—Microscopic section of vegetation removed from mitral valves. (Courtesy of Dr. William Antopol.)

from the patient's blood (immuno-transfusion). One is at once confronted with the futility of any of the recommended therapeutic measures when a diagnosis of this condition is established. The most important elements are rest, bodily and mental, general hygienic care, massage, good nursing, fresh air, an abundant nourishing diet, and other methods tending to increase the patient's general resistance. It is very easy to do too much. These patients rarely escape meddlesome treatment. The anxious family, showered with well-meaning advice from many quarters, is forever urging the doctor to try some new and often absurd method of treatment; and the unfortunate patient, whose main chance lies in his peace of mind and body, is surrounded by an atmosphere of perpetual turmoil and, if he be well to do, is often subjected to a succession of consultations, which alarm and tire him and lessen the few chances of recovery that are his.

Prophylaxis: Since treatment is so unsatisfac-

tory, prevention is all the more important. The first and most vital element is the prevention of chronic valvular diseases of the heart. Second is the early detection and thorough treatment of acute rheumatic fever, chorea, acute tonsillitis, acute respiratory infections, oral sepsis, syphilis, etc., which are important etiological factors in chronic valvular diseases of the heart. Third, measures should be taken to prevent individuals in whom chronic valvular disease has occurred from developing this very serious malady, subacute bacterial endocarditis. Especially is it important to exercise caution in the treatment of acute respiratory and nasopharyngeal affections, and use care in removing foci of infection (teeth, tonsils, sinuses, etc.). Immediate and sufficient rest, one to two weeks, during and after any acute infection—even a common cold—should be instituted.

Summary: In summarizing this class of patients one is ready to believe with Thayer and others that this disease is often distressingly chronic. Days and weeks and months pass by—every day with its morning of hope and its evening of depression. The fatigue, fever and anorexia continue—moments, days, even weeks of apparent improvement and elation fatally dispelled by ever-recurring aggravations of first one, then another symptom. And slowly and surely the patient loses ground. The anemia increases. Evidence of myocardial insufficiency are added to the symptoms of chronic sepsis. The complexion assumes the peculiar earthen color. With the advancing renal changes the anorexia becomes more obstinate, and is often associated with nausea and vomiting. Edema of the face and dependent parts sets in. Profoundly enfeebled, with pale, anxious face, puffy, transparent eyelids, inert, waxen, bulbous fingers, the patient is harassed by the dyspnea, depending in part on the myocardial weakness, by the anemia, by the nephritis, in part on the sepsis, associated by the constantly recurring painful cutaneous or splenic emboli, and persistent nausea. The least movement exhausts him; the nightly sweats weaken him; he is so tired! The attentions of the nurse annoy him. And so often to crown his ills, a sudden hemiplegia with flaccid arm and leg, drooping mouth, open eye, etc., comes. Finally, with wrinkled forehead and care-worn face, he sinks into a troubled sleep and breathes his last—the victim of chronic sepsis, or myocardial weakness, or nephritis, or a terminal pneumonia or a cerebral embolism—or all. Few situations are more trying for the physician; few make more demands on his equanimity, his tact and his firmness. Here as in many other emergencies of practice, it is difficult to protect the patient from his friends. It is not my desire to imply that all patients with continuous fever are victims of this dreadful disease; however, I hope the points stressed in this paper will bring before you the importance of considering the heart as a

factor in the differential diagnosis when patients with the above symptoms present themselves for diagnosis.

DISCUSSION

EDGAR F. KISER, M.D. (Indianapolis): It seems to be the consensus of opinion that the condition under consideration is not generally recognized or generally understood by most physicians, yet its occurrence is far from rare. The fact that Doctor Moore reports twenty-four cases, and that, in my limited practice, I will see from two to four cases suffering from this disease each year, makes it perfectly clear that the disease is far more common than is generally supposed.

I was struck by the manner in which Doctor Moore emphasized that the "diagnosis is usually difficult, seldom easy, and often impossible," but I believe that the diagnosis is overlooked oftenest because of the fact that we forget about the existence of the disease. The important thing to remember is that the disease, once established, is practically one hundred percent fatal, and the recognition and care of the less serious types of endocarditis are of supreme importance.

Practically without exception, subacute bacterial endocarditis is superimposed upon an already existing valvular lesion. We do not have subacute bacterial endocarditis in an otherwise normal heart. It always comes after damage that previously has been done to the endocardium.

What I wish particularly to stress is the importance of the prevention of heart disease. We have proven that that is practicable in the care and prevention of tuberculosis. If one has any knowledge of the history of tuberculosis he cannot help but be struck by the marvelous improvement that has been made within the past decade in the tuberculosis situation. I do not have the statistics at my tongue's end, but I do know that the reduction of morbidity has been phenomenal. There is no reason in the world why an organization working along the same lines with diseases of the heart cannot and will not bring about a similar reduction in the incidence of heart disease.

Heart disease is always the result of infection. We no longer believe that it is a direct result of physical strain, or the abuse of tobacco, or the thousand and one things upon which it has been blamed in the past. It is practically always the result of infection, and most frequently infection by one of the various groups of streptococci, hence the importance of careful attention to the diseases that are forerunners of endocardial inflammation. If we can but check and prevent the development of acute endocarditis following acute infectious diseases we, in a large measure, will have prevented the development of subacute bacterial endocarditis which Doctor Moore has pointed out as almost certainly fatal and which each year reaps a harvest of deaths that are preventable.

If Doctor Moore's paper has brought home this

one thought the time will have been very well spent.

G. S. BOND, M.D. (Indianapolis): Doctor Moore has given us in his paper such a concrete picture of subacute bacterial endocarditis that it really makes the discussion of the subject a very simple matter. This malady is a terrible one as he presented it. Anyone will subscribe to this fact who has watched a patient with this condition through week after week. At times there is a little ray of hope, only to be lost the next week. Some treatment seems to do some good and then fails a little later, so that the doctor watches the patient sink gradually down and down to death within a few months' time. This can but emphasize the hopelessness with which we have to meet the situation. There is just one thing that can be said about this condition, and that is the comparative infrequency of it. In spite of what Doctor Kiser has said, the cases of subacute bacterial endocarditis are rare when compared with the more common diseases. When you stop to consider that a man doing heart work sees only two or three such cases a year, and that even in such hospitals as the Massachusetts General they report only from three to six such cases a year, it emphasizes the relative infrequency. This, however, is the stumbling block in diagnosis. We see so many cases of typhoid fever, tuberculosis, and similar diseases that we are constantly on the lookout for them. With malaria, however, we are not accustomed to expect it, and consequently we are apt to overlook the diagnosis and it slips through our hands. The situation is similar in the subject of Doctor Moore's paper. We are not on the lookout for it and consequently we make a great many mistakes before we realize what we actually are dealing with.

I wish to go back and add to what Doctor Moore has said about the development of this condition, because it emphasizes some of the points in diagnosis. Subacute bacterial endocarditis always develops on top of an old heart lesion and never in an undamaged heart. Clinically these lesions vary, they may occur after rheumatic heart disease, congenital heart disease, syphilis of the heart, or the degenerative heart disease of old age. However, when we study the autopsies in the cases of subacute bacterial endocarditis we find that at least ninety percent have evidence of old rheumatic conditions existing prior to the onset of this condition. This evidence warrants the assumption that this form of endocarditis is almost always engrafted on old rheumatic endocarditis. Consequently in order to understand the process one must be conversant with the order of events as they develop.

Rheumatic endocarditis develops early in life, associated with rheumatism, tonsillitis, and chorea. It leaves behind its lesion, usually of the mitral valve, which consists of a stenosis and insufficiency. As the case progresses, subsequent attacks of the

infection may add additional injury to the valves. The natural course of events is to remain latent for a number of years and then show evidence of heart failure, either with or without auricular fibrillation. At some time in this sequence of events the patient becomes infected with streptococcus viridans from some local focus of infection as Doctor Moore has told you. This introduces into the picture another endocarditis of a different type which is known as subacute bacterial endocarditis. This latter form also has a different pathology and a different course than that of the rheumatic endocarditis. This immediately brings into the diagnosis the question of whether this is a recurrence of the old rheumatic type, or a subacute bacterial endocarditis, and the decision is a very hard one to make. There are certain distinguishing points between these two. Rheumatic endocarditis frequently leads to auricular fibrillation, the other form practically never shows this. Pericarditis is quite common in the rheumatic type and never seen in the other form. The appearance of petechia and emboli are very frequent in subacute bacterial endocarditis and rarely seen in the rheumatic form. These points are helpful in distinguishing between a recurrence and a new infection.

Subacute bacterial endocarditis has a definite course, the beginning of which shows few symptoms other than fever, and then later is marked by the formation of emboli and the definite symptoms which Doctor Moore pointed out. Unfortunately the blood cultures are not always a help in determining the etiology—first, because of the impossibility of getting the cultures to grow, although the organism may be in the blood, and second because there is a bacteria-free stage of the process when there are no organisms in the blood although they are still present in the heart valves. The diagnosis, therefore, must be made on symptoms. In the later stage of the disease, when it is outspoken, this is not difficult, or if it is confused it is with some other condition of equally serious import. It is in the early part of the disease, therefore, when the differential diagnosis is difficult. The patient is simply running a fever, feels draggy, and there are very few findings to account for it. At this time it may be mistaken for tuberculosis, typhoid fever, undulant fever, and focal septic infections. Therefore, anything that will help in differentiating these is of service, and there is one point to be borne in mind. If it is subacute bacterial endocarditis there must be an existing heart lesion, as evidenced by the murmurs. If this is not present the weight of evidence is that it is some other infection than the one which we are discussing. Two or three other points aid in this differentiation. Subacute bacterial endocarditis does not occur in a heart that is already gone into the stage of decompensation. It also is true that it is not seen in a heart condition that already has

developed fibrillation and it is possibly true that after the mitral-stenosis is well developed it is rarely seen. Consequently these are negative points which aid in its differentiation.

In regard to the prognosis, in true subacute bacterial endocarditis it is always bad and there are very few cases reported which have ended in recovery. This, however, is applicable to those conditions which can be definitely classified as subacute bacterial endocarditis. It is true that there are other forms, as streptococcus viridans of the blood, which do not run the same rapidly fatal course. This leaves open the possibility that there are borderline cases between these two where the prognosis varies, and this accounts for some of the discrepancy in the figures of mortality. The simple finding of streptococcus viridans in the blood does not mean a fatal outcome, as I have watched patients with this organism in their blood over several years who never developed endocarditis. On the other hand, when you have the frank, outspoken picture of the endocarditis with petechia, hemorrhages and emboli, I never have seen a case that recovered.

In regard to treatment, Doctor Moore has emphasized very thoroughly what I would like to bring out. There is very little that seems to do any good. However, no doctor likes to see his patient slowly going down hill without trying something, and no harm can be done by using many of the preparations which have been tried. What one should be cautious about, however, is the incurring of needless suffering and expense to the patient by a great many useless operative procedures in the vain effort to stamp out the infection. On the whole the management of these cases requires only the good judgment to handle the patient intelligently and the family in the practically hopeless situation which may last over a period of as much as two years. Above all, the prevention of their falling into the hands of quacks who delude them into thinking something can be done, is of prime importance.

THE TREATMENT OF HAY FEVER*

HAROLD S. HATCH, M.D.

INDIANAPOLIS

Seasonal hay fever, or pollenosis, affects one percent of our population (Scheppegrell¹), and produces much discomfort and suffering among those allergic to one or more pollens.

Avoidance of symptoms by removal to a locality relatively free from pollen long has been practiced by some patients sensitive to the weed pollens. Northern Michigan, the seashore, and the White Mountains of New Hampshire are popular refuges for these sufferers, and, while the atmosphere of these places is not at all times free from pollen, they do offer a substantial measure of relief.

However, not all people, for financial or other

reasons, can leave home for several weeks each summer and travel a considerable distance to one of these resorts, and for them air filters have been devised by Cohen.^{2 3} These filters are ninety-nine percent efficient in rendering the air of a room pollen-free. Cohen has found that patients by remaining in such rooms a number of hours each day may go through the season very comfortably. Modern forced ventilating systems, which filter and wash the air which is delivered, either cooled or heated, throughout a building, are becoming more and more popular. So far as I can learn, none of them have sufficiently fine filters to remove much of the pollen from the air, but such filtration could be achieved easily. In years to come we may see patients with all types of inhalation allergies living in apartments and working in office buildings supplied with properly filtered air which will give them relief from their symptoms.

To reduce the pollen content of the air by weed-cutting campaigns long has intrigued the minds of many people. It is doubtful whether these weed-cutting campaigns will decrease appreciably the pollen content of the air in most localities, since pollens are carried many miles by the wind. Chicago, with its prevailing winds off the lake, would seem to be an ideal place for testing such a procedure. Last year this was done, and, while the pollen content of the air was considerably reduced, the actual relief to hay fever sufferers was negligible.

The majority of our patients cannot spend several weeks each year in a climate with a low-pollen content, neither can they afford filtration of the air in their homes. Until recent years the medical profession has been able to offer these patients very little relief. Noon⁴, in 1911, and Freeman⁵, in 1914, published their results with hyposensitization treatment. Since that time a great deal of work has been done on the many problems of hay fever. At the present time it is the best understood of all the allergic diseases, and most physicians are convinced of the efficacy and rational basis for hyposensitization therapy. In fact, there are few conditions in which the physician may expect better results from treatment.

In the management of hay fever four questions are of paramount importance:

1. To what pollens is the patient exposed?
2. To what pollens is he sensitive?
3. What dosage of pollen extract will be necessary to desensitize him?
4. How may constitutional reactions be avoided?

If the physician can answer each of these questions accurately, he may confidently expect well-nigh perfect results from treatment:

1. To what pollens is the patient exposed?

The answer to this question is possible only after a detailed study of the territory in which the patient lives. Fortunately such a study has been made in Indiana by O. C. Durham,^{6 7} who

*Presented before the Lawrence County Medical Society March 6, 1929; also the Sixth District Medical Society, Shelbyville, May 23, 1929.

has reported not only the flora and the time of their pollination, but also has made some valuable studies on the pollen content of the air during the pollinating seasons of the trees, grasses and weeds. The pollens causing hay fever are air-borne. Rarely, some of the heavy ones, such as golden rod, aster and corn, may cause symptoms in persons coming in close contact with them.

The first pollens to make their appearance are those of the trees, the more common ones being maple, elm, box elder, cottonwood, ash, oak, and walnut. These appear during the latter part of March, and some of them are in the air until mid-May. They are not of great importance, because the period of pollination for each genus is short, the amount of pollen relatively small, and the exposure not great, unless the contact is close.

The grasses follow the trees, appearing during the latter part of May, and lasting until late July. There are 200 species of grass in Indiana, but fortunately it is not necessary to test our patients to all of them. Aaron Brown has proven that patients sensitive to one species of a genus are sensitive to all. Hence it is sufficient to test our suspected grass cases to timothy alone. English plantain is a factor, also, at this time, appearing early in June and lasting until late July. It should be

borne in mind that the plantains and the grasses, while pollinating at approximately the same time, belong to two separate, distinct families and therefore separate extracts must be used in testing and treating.

Following the grasses we come to the fall, or late hay fever season, dominated by the ragweeds. Both giant and dwarf ragweed begin to pollinate about August 15th, and continue until the first real frost, the maximum amount of pollen coming about September 1st. However, the ragweeds are not the only offenders at this season. While they are of less importance, the amaranth group (pigweed and spiny amaranth) and lamb's quarter are frequent offenders.

2. To what pollens is the patient sensitive?

It is essential that the offending pollens be detected, if desensitization is to be carried out. Knowing the air-borne pollens occurring in the vicinity, and the time of their pollination, we may limit our tests to those pollens present at the time symptoms occur.

In testing we may use the scratch or the intracutaneous methods. In the case of pollens, it should be borne in mind that these testing extracts are very powerful. For the general practitioner the use of the scratch method is urged, as serious

POLLEN CALENDAR FOR INDIANAPOLIS

| BOTANICAL NAME | POPULAR NAME | DATES OF POLLINATION | | | | | | |
|-------------------------|--------------------|----------------------|-------|------|------|------|------|-------|
| | | March | April | May | June | July | Aug. | Sept. |
| Acer Sascharimum | Maple | xx | x | | | | | |
| Ulmus Spp. | Elm | x | x | | | | | |
| Acer Negundo | Box Elder | | xxxx | | | | | |
| Populus Deltoidea | Cottonwood | | xxx | x | | | | |
| Fraxinus Americana | Ash | | xxx | x | | | | |
| Quercus Spp. | Oak | | | xxxx | | | | |
| Juglous Nigra | Walnut | | | xxx | xx | | | |
| Rumex Crispus | Yellow Dock | | | xx | xx | | | |
| Hicoria Spp. | Hickory | | | xx | x | | | |
| Rumex Acetosella | Red Sorrel | | | xx | x | | | |
| Poa Pratensis | Blue Grass | | | x | x | | | |
| Plantago Lanceolata | English Plantain | | | | xxxx | xxx | | |
| Dactylis Glomerata | Orchard Grass | | | | xx | | | |
| Poa Compressa | Canada Bluegrass | | | | xx | | | |
| Phlenuum Prateuse | Timothy | | | | x | xxx | | |
| Chenopodium Album | Lamb's Quarter | | | | | xxxx | xxxx | xxx |
| Amaranthus Spinosus | Spiny Amaranth | | | | | xxxx | xxxx | xxx |
| Agrostis Palustris | Redtop | | | | | xx | | |
| Amaranthus Retroplexus | Pigweed | | | | | xx | xxxx | |
| Acniad Tarmariscina | Western Water Hemp | | | | | xx | xxxx | xx |
| Cannabis Sativa | Hemp | | | | | x | xxxx | xxx |
| Zea Mays | Corn | | | | | | xx | |
| Xanthium Spp. | Cocklebur | | | | | | xxxx | xx |
| Ambrosia Trifida | Giant Ragweed | | | | | | xxx | xx |
| Ambrosia Elatior | Short Ragweed | | | | | | xx | xxx |
| Ambrosia Bidentata | Southern Ragweed | | | | | | xx | x |
| Iva Ciliata | Marsh Elder | | | | | | x | x |
| Syntherisma Sanguinalis | Crab Grass | | | | | | | xxxx |
| Artemisia Annua | Annual Sage | | | | | | | xx |

This table compiled from data furnished by O. C. Durham.

The plants are arranged chronologically.

x indicates approximately one week.

constitutional reactions have resulted from the parenteral introduction of strong pollen extracts in the performance of the intradermal test. The scratch test is also simpler to use, and, while less sensitive than the intracutaneous method, allergic patients usually give definite reactions with it.

Usually pollen sensitivities are multiple, patients reacting to more than one, and, unless these pollens are related closely botanically, desensitization with extracts of each of them must be carried out.

3. What dosage will be necessary for desensitization?

The rationale of the treatment is to build up in the patient, by gradually increasing doses of extract, a tolerance to the pollens to which he is sensitive. Treatment should be begun at least six to eight weeks before the expected onset of symptoms. While desensitization may be carried out during the hay fever season, it is much less effective than pre-seasonal treatment, and the danger of provoking serious constitutional reactions is so great that it should not be resorted to by those who are not experienced in the method.

To determine the initial dose, skin tests should be done with various dilutions of the extract, and treatment begun with a dilution too weak to give rise to any skin reaction. The more sensitive the patient, the smaller the amount of extract necessary to desensitize him. However, it is not possible to ascertain for any given patient just what his maximum dosage should be. It probably is best always to build up the dosage as high as possible. Much larger dosage is necessary to protect our patients in Indiana, where they are exposed to large amounts of pollen, than is necessary in those sections of the country where the pollen is much smaller in amount. Commercial extracts are being made much stronger than formerly, and results from their use are proportionately better.

As to the intervals between treatments, Duke⁹ and Scheppegegrell¹⁰ recommend short treatment intervals, repeating the injections every day, or even twice daily. On the other hand, Van der Veer, Cook and Spain¹¹ and others stoutly maintain that treatments should not be given more often than every five to seven days. When the patient presents himself early enough, the more conservative method of injections at longer intervals is undoubtedly best. However, when tolerance must be built up rapidly in patients beginning treatment late, the shorter treatment intervals may be used for the smaller dosages, gradually increasing the time between injections as the larger dosages are reached. Treatments must be continued until well past the peak of the pollen season. Failure to continue treatment long enough is responsible for many of the disappointing results in this work. Many practitioners wrongly assume that with the onset of the pollen season patients will absorb enough pollen through the mucosa of the upper

respiratory tract to maintain their tolerance.

The recital of the procedure followed in a typical case will illustrate several points: Miss D. B., age twenty-eight, presented herself for treatment on June 1, 1929. She complained of hay fever which had occurred seasonally during the last five years. Symptoms each year came on about August 15th and persisted until the first frost. The time of her symptoms tells us that her sensitivity is to one or more of the weed pollens. There are only a few such air-borne pollens in Indiana. Therefore, we did skin tests with extracts of these pollens and found her reacting strongly (4+) to dwarf ragweed, mildly (1+) to giant ragweed, and mildly (2+) to annual sage. A treatment set was made up, consisting of mixed ragweed ninety percent and annual sage ten percent, these proportions being used because the patient was exposed to much more ragweed than sage pollen. Next, the patient was tested with various dilutions of this combined extract. She reacted on skin testing to dilutions of 1-100, 1-1,000, 1-10,000, but failed to react to a dilution of 1-100,000. Hence, treatment was begun with a dilution of 1-100,000, and the following treatment intervals and dosages were used:

| DATE | DOSE NUMBER | DOSE | DILUTION | POLLEN | UNITS |
|------|-------------|------|-----------|--------|-------|
| 6/8 | 1 | .2 | 1-100,000 | | 2 |
| 6/12 | 2 | .3 | 1-100,000 | | 3 |
| 6/15 | 3 | .5 | 1-100,000 | | 5 |
| 6/18 | 4 | .7 | 1-100,000 | | 7 |
| 6/22 | 5 | .1 | 1-10,000 | | 10 |
| 6/25 | 6 | .4 | 1-10,000 | | 40 |
| 6/29 | 7 | .7 | 1-10,000 | | 70 |
| 7/2 | 8 | .1 | 1-1,000 | | 100 |
| 7/6 | 9 | .3 | 1-1,000 | | 300 |
| 7/9 | 10 | .06 | 1-100 | | 600 |
| 7/13 | 11 | .12 | 1-100 | | 1200 |
| 7/18 | 12 | .24 | 1-100 | | 2400 |
| 7/23 | 13 | .32 | 1-100 | | 3200 |
| 7/29 | 14 | .42 | 1-100 | | 4200 |
| 8/2 | 15 | .43 | 1-100 | | 4300 |
| 8/6 | 16 | .48 | 1-100 | | 4800 |
| 8/12 | 17 | .5 | 1-100 | | 5000 |
| 8/19 | 18 | .5 | 1-100 | | 5000 |
| 8/26 | 19 | .5 | 1-100 | | 5000 |
| 8/31 | 20 | .5 | 1-100 | | 5000 |
| 9/7 | 21 | .5 | 1-100 | | 5000 |
| 9/14 | 22 | .5 | 1-100 | | 5000 |

It will be noted from the above schedule that the patient's tolerance was built up to a high point before the expected onset of symptoms, and was maintained at this high point until the peak of the season was well passed.

In gauging each dose the effect of the previous one should be ascertained. If marked local reaction occurs, the subsequent dose should be decreased, or maintained at the same amount as the previous one. Dosage for each patient must be individualized carefully. Commercial treatment sets, containing a series of measured doses, leave no leeway for individualizing the treatment, hence they are dangerous to use routinely on patients of varying sensitivity.

4. How many constitutional reactions be avoided?

These are the *bete noire* of the physician treating hay fever. In spite of the most extreme care, reactions will occur occasionally. They usually come on within a few minutes after an injection, and are manifested by hay fever, asthma, general urticaria, faintness, sweating and generalized œdema. The treatment is the prompt administra-

tion of a fresh, reliable solution of adrenalin at, or just above, the site of the pollen injection. This may well be repeated in five or ten minutes if relief is not prompt. Since these symptoms usually come on within a few minutes after an injection, patients should remain in the office for thirty minutes following each treatment, and the physician should have at hand a hypodermic syringe loaded with adrenalin for prompt use in case of need. Since the rapidity with which the extract reaches the blood stream has much to do with the likelihood of reactions, care should be taken that the syringe needle does not enter a blood vessel. Hence, injections should never be made into the muscle but into the subcutaneous tissue, and the plunger of the syringe should be withdrawn slightly to make sure that the needle has avoided a vessel. It is good practice to leave the injection in a lump, thus perhaps slowing the rate of its absorption somewhat. The careful noting of the local effect of the previous dose is an important precaution, the dose being decreased or maintained stationary if much local reaction followed the treatment.

Regularity of treatments is also important. During treatment the patient's tolerance fluctuates greatly. Unless treatment intervals remain fairly constant, it is much more difficult to avoid reactions. During the course of treatment, when patients find it necessary to miss one or two injections, the safe procedure is to drop their dosage well below that which they received last, and then build it up again as rapidly as possible. Some physicians make it a practice to administer ephedrine hydrochloride grain three-eighths *per oram* a few minutes before each injection. Adrenalin may be given, mixed with the pollen extract.

Results of Treatment. The success of treatment varies inversely with the amount of pollen to which the patient is exposed. The early type of hay fever, due to tree pollens, is most satisfactory to treat, as these patients are exposed to relatively small amounts of pollen and for a brief period only. The grass cases are a little more difficult to treat, yet they usually do well. The fall type, due to the weed pollens present in great abundance, are the hardest of all to treat successfully. Figures gathered from various clinics throughout the country show that we may expect thirty-five percent of our patients to obtain complete relief; fifty percent will go through the season with very little discomfort; ten percent will obtain only slight relief, and five percent will be uninfluenced by treatment. In other words, treatment is successful in eighty-five percent of cases, and unsuccessful in fifteen percent. Treatment fails in this latter group undoubtedly because we have failed to find the offending pollen, insufficient dosage has been used, or the injections have been discontinued too soon.

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BACTERIOLOGY OF DIPHTHERIA*

C. F. ADAMS, M.D.

INDIANA STATE BOARD OF HEALTH
INDIANAPOLIS

The diphtheria bacillus, sometimes known under the new cognomen *Corynebacterium diphtheriae*, is a slender, sometimes clubbed and irregular, Gram-positive rod that does not form endospores. In its failure to form endospores it finds its chief distinction from true, and more common, bacilli, and in its being non-acid fast it differs from such organisms as those causing tuberculosis.

The outstanding feature of this organism is the metachromatic granule in each end of the rod which retains the blue stain in the procedures mentioned below. This gives the clubbed appearance that is so characteristic of this form, the small, blue, metachromatic granules standing out clear and distinct in each end of the cell's body.

The morphology of the diphtheria bacillus is so characteristic that its identification generally causes no difficulty. In smears from cultures the organism is stained easily with several well-known dyes, and its culture upon Loeffler's blood serum medium is merely a matter of elementary technique. For an incubator, one's own vest pocket, or even a chicken incubator, may be used, eight to twelve hours being sufficient to produce requisite growth. Direct smears should be tried, but these are accurate in only about thirty-five percent of cases. Ponder's stain and Albert's technique probably are the favorite staining procedures, and almost any microscope furnished with an oil immersion lens and good light (preferably artificial) will suffice to demonstrate this bacterium.

Ponder's stain is made as follows:

| | |
|------------------------------|-----------|
| Toluidin blue (Grubler)..... | 0.02 gram |
| Glacial acetic acid..... | 1 cc. |
| Absolute alcohol..... | 2 cc. |
| Distilled water to | 100 cc. |

The smear is made on a cover glass and fixed by passing through a flame. A small quantity of the stain is placed on the smear, the latter inverted and placed upon a slide and examined immediately by the oil immersion, no washing of the smear

*This is the third article sponsored by the Diphtheria Prevention Committee of the Indiana State Medical Association.

in water being needed.

Albert's stain (Laybourn's modification) made as follows:

Solution 1:

| | |
|---------------------------|-----------|
| Toluidin blue | 0.15 gram |
| Malachite-green | 0.20 gram |
| Glacial acetic acid | 1 cc. |
| Alcohol, 95% | 2 cc. |
| Distilled water | 100 cc. |

Let stand for twenty-four hours and filter.

Solution 2:

| | |
|------------------------|---------|
| Iodin crystals | 2 cc. |
| Potassium iodide | 3 grams |
| Distilled water | 300 cc. |

Technique: Fix smear in flame and add solution No. 1, allowing the preparation to stand for at least three minutes; wash in tap water and add solution No. 2 for one minute, wash in tap water, blot dry and examine direct. The smear for this stain is better made on a slide than on a cover glass.

There are several pseudo-diphtheria bacilli, the so-called diphtheroids, that are often mistaken for the true bacillus of diphtheria. Two of these are of special interest, *Bacillus (Corynebacterium) hoffmanni* and *Bacillus (Corynebacterium) xerosis*. At times it is almost impossible to distinguish between these and the diphtheria bacillus. The hoffmanni form, however, generally is much more plump and stains more evenly, the granules seldom showing. The xerosis form is more prone to show granules, these latter being small.

The surest distinction between these forms is found in their cultural behavior; the hoffmanni form does not ferment dextrose, sacchrose or dextrin; xerosis ferments dextrose and sacchrose but not dextrin; and the diphtheria bacillus ferments dextrose and dextrin but not sacchrose.

These cultural tests, however, are rather complicated, and none but well-equipped laboratories should attempt them.

Aside from the diphtheroids, there are attenuated strains of diphtheria bacilli that give much cause for alarm when found in throats. Many of these are found in the throats of convalescents, or convalescent carriers, and others are found in the throats of people who have never had diphtheria, so-called contact carriers. The forms in convalescent carriers frequently increase in numbers during the recovery of the patient and as a consequence are a source of much annoyance. Those that are found in throats of healthy persons generally are of a low-grade virulence. The persistence of diphtheria bacilli in throats during and following convalescence is quite variable indeed, but of considerable scientific interest. In a study of 605 cases, Park and Beebe found that the bacilli disappeared within three days in 304; they continued for seven days in 176 cases; for three weeks in 12; four weeks in 4; and for nine weeks in 2. Park and Beebe examined also 330 throats of persons not known to have been in contact with

diphtheria cases and found virulent strains in 8, two of whom developed diphtheria later. In 24 of these 330 normal throats non-virulent forms were found.

With reference to the virulence of the diphtheria bacilli in normal throats, it is held by good authority that only about seventeen percent of the one or two percent of people harboring these organisms have bacilli of sufficient virulence to be dangerous to others.

The presence of diphtheria bacilli in the throats of convalescents or contact-carriers often necessitates making a virulence test through the use of laboratory animals. This test is about the only one of any reliability that has thus far been devised for the release of carriers from quarantine. It is rather elaborate, and requires a variable amount of time, and must be carried out very carefully, the guinea pig being the animal of choice.

1. A throat swab should be taken, a culture from this being grown over night.
2. The organisms must then be isolated by the "streak" method on plates of blood agar. This requires generally another night in the incubator.
3. From several isolated colonies a tube of one per cent glucose bullion, neutral or slightly alkaline, is inoculated.
4. Incubate for three days (Kolmer).
5. Examine for purity, and then inject two cc. of this subcutaneously in the mid-abdominal line of a 250-gram guinea pig. It is deemed best to use the unfiltered culture because toxin is but one of the elements of the disease-producing ability of these bacilli, toxin production in mucous membranes being different.
6. This animal should be watched carefully for at least four days. A slight toxemia, if accompanied by edema at site of inoculation, should be regarded as positive.
7. After death, autopsy should show the adrenals enlarged and hemorrhagic.
8. As a control, a second pig should be injected with the same amount of culture to which has been added 50 to 100 units of diphtheria antitoxin. This pig should live, although the strain under examination is the genuine diphtheria bacillus. This entire procedure is variable, according to the laboratory doing the work, some preferring to shorten the technique wherever possible.

Diphtheria bacilli have been found to persist for five months on children's toys; and it has been observed that convalescent children carrying virulent bacilli determined by the virulence test, but later released from quarantine after two negative cultures, have been found responsible for the transmission of this disease.

In taking a swab from the throat, the physician should be sure there has been no medication previously used that might make it impossible to get

a smear containing the diphtheria bacilli. Negligence in this point of the procedure frequently is the cause of negative laboratory reports in cases of genuine diphtheria.

Probably the best way to take the swab is to wait at least an hour after any local medication has been used, then avoid taking superficial material from heavy exudates, using rather material taken from between the membrane and the tissues. Taking superficial swabbings from heavy exudates probably is responsible for fifteen to twenty percent negative laboratory reports in cases that are in reality diphtheritic.

With reference to carriers, the nose and nasopharynx are of great importance because the diphtheria bacillus often grows in the mucous membrane of these locations without giving any evidence of its presence. There are epidemics on record where it was demonstrated definitely that the disease could not be checked until swabs were taken from both nose and throat. Middle-ear disease and infected wounds also are prolific sources of diphtheria, and in case of group examinations such things should be looked into carefully.

The container used by the State Board of Health consists of a metal applicator tipped with absorbent cotton, which is placed in a tube plugged with cotton, the whole placed in an oven and sterilized. This sterile outfit is then mailed out in an ordinary mailing tube supplied with a data card.

The outfit used in looking for carriers is virtually the same as the foregoing except that the sterile tube containing the swab is sent out in bulk, in lots of fifty, one hundred and five hundred. They can be returned to the laboratory in like manner.

With reference to diagnosis, we feel that the doctor in the case should request a wire from us at his expense. At times we have viewed with troubled hearts a positive diphtheria culture from a child, but the physician had neither administered antitoxin nor asked for telegraphic report.

In sending swabs, or anything else, to the State Board of Health Laboratory it is of utmost importance that the data card be filled out in a very legible manner, preferably with a typewriter. It sometimes happens that the physician's name is left off, so we do not know to whom to make the report. Often the post office name is absent and again we are at sea as to whom we should report. As a result of inadequate data we have on hands at the present time forty-five cards which we are unable to identify with any physician in the state. About twice a year we throw away in the neighborhood of one hundred and fifty such cards because we deem it useless to hold them longer. This means that there are about three hundred physicians scattered over the state who have been disappointed in never having received their reports.

The State Board of Health Laboratory especial-

ly requests that the metal applicator be so bent and packed that the handle portion of it will remain on the outside of the glass tube. To have the handle portion on the *inside* of the tube endangers the technician working with this material, laboratory infections being possible under such conditions. Also, we request that matches, or other wood, be not used for applicators. In the absence of the metal form sent out by the State Board of Health Laboratory, use any piece of wire that is pliable, and have it about six inches long so it can be bent down along the side of the tube. This enables the technician to bend it back into a straight applicator in such a manner that the hand does not come into contact with infectious material.

Physicians using the State Board of Health Laboratory should send the material by ordinary mail, especially near the close of the week because this form of mail is surer of delivery, oddly as it may seem, on Saturdays and Sundays than if by special delivery.

COLLECTING MEDICAL FEES (And Comments on State Medicine)

M. A. AUSTIN, M.D.

ANDERSON

In response to a number of letters which I have received commenting most favorably on the article I had in the February number of *THE JOURNAL* entitled "A Serious Medical Problem," I have this suggestion to make as a possible solution to our present burden of carrying an increasing load of non-paying patients.

It is my belief that a majority of our patients would pay us *if they had the money to do so*, but due to high-pressure sales methods the average family has been induced and forced into purchasing many luxuries they cannot afford. These families have mortgaged their future earnings to such an extent that no provision for sickness or accident or hospital service is possible under existing circumstances. And, since they have been so well educated in installment payments, it appears to me that now is a proper time to utilize the present psychologic moment to our advantage. This could be done by having every physician mail a form letter to their families who are delinquent and in the letter explain the situation and offer a compromise, which any family could meet, and, if they fail to do so, refuse any and all further service. The letter could read as follows:

"Inasmuch as the present financial burden carried by the medical profession has reached a point demanding drastic changes to protect our own interests, it is necessary to have you see me at once and arrange for a settlement of your past due account, and also arrange your budget to pay for any further services you or your family may need in the next twelve months.

"The amount you owe me at this time is \$..... You can make arrangements with me to settle the account by monthly payments. In addition to this if you wish my further services you will have to pay me, with the partial payments, an additional amount equal to one-twelfth of your weekly income for the ordinary medical care to yourself and wife, and one-fifth as much for each child.

"Example: Average earnings, \$30 per week. Medical care, \$2.50 for self and wife. Two children, \$1.00. Total medical cost, \$3.50. Balance due on old bill, \$24. Monthly payment, \$2. Total budget payment to pay for services rendered and regular

medical care for one month paid as insurance if guaranteed for a year, \$5.50, each month, *if paid in advance.*

"If a physician's services are not worth as much to a family as the sewing machine or vacuum cleaner payments, then his services can be dispensed with entirely.

"Not hearing from you, I will have to place my account for collection and your family on my 'cash only' service list."

If every physician in a community sends out similar notices then the notices can be printed in quantities and sold reasonably in pad form.

In a study that I made several years ago when preparing a series of articles on medical economics, I went over the bills of a number of patrons for whom I had rendered service over a period of years and it was an exceptional family that had a greater amount of need for a physician than a week's salary would pay for in a year. This does not include obstetric, surgical or fees of specialists, of course.

Indiana being an industrial state and possibly eighty percent of the population earning wages directly or indirectly paid by manufacturing interests, it is a certainty that the medical profession must demand and arrange for payment on a monthly fee basis for a great majority of their clients or never get paid at all. Alternative to this is the certainty that our failure to provide adequate services will force upon us a condition similar to the English system of the Friendly societies, or the German system of the Krankenkassen, and, pending that, have the manufacturers take over and employ a physician for not only all the so-called compensation services, but provide complete service, including all the family.

Whatever we do we can rest assured that many of us are going to see state medicine an actuality. The entering wedge for this is the politicians' bid for the soldier vote. Already we have free medical, surgical and hospital care for all ex-service men and women, irrespective of their disability, and a recent survey of the government hospitals showed that forty-five percent of the patients in these hospitals are now being treated for conditions that have no connection with their service during the war. On Tuesday evening, February 25, 1930, in Anderson, the American Legion held a big meeting and were addressed by Congressman Albert W. Vestal, Representative of the Eighth District of Indiana. His bid for the soldier vote was not only to see that the present free hospitalization of soldiers be continued, but that, with the building of the new hospitals as planned, *and one of which will be built here in Indiana*, this free hospital care will be extended to the wife and children of the ex-service man and to all his dependents, which includes, of course, his father and mother, brothers and sisters, foster-father and foster-mother, grandparents, uncles and aunts, and perhaps cousins. In addition to this, Mr. Vestal stated that he would sponsor a bill to pay the families an allowance, whenever a soldier is confined in a government hospital, irrespective of the cause of his hospitalization. I have

just had a man tell me he could not pay his bill because his step-daughter's husband had a serious case of scarlet fever and rheumatism which had disabled him for several months, and the step-daughter, her husband, and two children were being supported by my patient. Under Mr. Vestal's new law, and my patient being an ex-soldier, his step-son-in-law is now his dependent and could be hospitalized in a government hospital. And if the allowance for families is put over and my patient should become ill, then he could draw an allowance for the maintenance of his wife, two step-sons, his step-daughter and her husband and their two children, as well as his own parents, and a mother-in-law. *"But why bring that up? Check and double check."*

EDITOR'S NOTE:

As an indication of the progress that the movement toward state medicine is making, we ask our readers to read the article on World War Veterans' Legislation in the Bureau of Legal Medicine and Legislation of the A. M. A. as printed in the *Journal of the A. M. A.* (May 17, 1930, page 1585). The article is as follows:

"April 15, 1929, Mrs. Rogers of Massachusetts introduced in the House of Representatives a bill (H. R. 234) proposing an appropriation of \$11,500,000 for additional hospital, domiciliary and out-patient dispensary facilities for persons entitled to hospitalization under the World War Veterans' Act. This bill was referred to the Committee on World War Veterans' Legislation. Notwithstanding the fact that a request for notice of any hearing was filed by the Bureau the bill was reported favorably by the Committee on December 14. On Monday, December 16, the House passed it, carrying an appropriation of \$14,000,000. On December 18, the Committee on Finance reported the bill to the Senate, carrying an increased appropriation. It was passed in the Senate the same day. On the next day the House adopted the increase made in the Senate. Three days later the bill was signed by the President. And yet the total number of veterans awaiting hospitalization for injuries and diseases of service origin, December 1, 1929, was only 184.

"This appropriation of \$15,950,000 came on the heels of an appropriation made May 23, 1928, of \$15,000,000. It was made by Congress and approved by the President, presumably with full knowledge of the fact that only 184 veterans were awaiting hospitalization for service-connected injuries and that the wards of existing hospitals under the control of the Veterans' Bureau were only a little more than half filled by patients suffering from service-connected injuries and diseases. Whatever may be the duty with respect to caring adequately for persons suffering from service-connected injuries and diseases, it certainly cannot be argued on any rational basis that the federal government is bound to provide medical, surgical, hospital nursing and dispensary service for persons who are suffering from diseases or injuries not related in any way to military service.

"The policy that the government has adopted with respect to the medical, surgical, hospital, nursing and dispensary care of veterans is a policy that places the federal government in competition with private practitioners and private hospitals with respect to such services. The federal government can offer such care without cost to the beneficiary only because it can compel the taxpayers to pay for such gratuities. The private practitioner and the private hospital, however, whose very existence depends on their earnings must look to their individual patients for compensation; they cannot do as the government is doing, furnish free services and then compel some person other than the beneficiary to pay for them. The present situation began with a seemingly harmless provision introduced into the World War Veterans' Act of 1924 authorizing the director of the Veterans' Bureau to allow veterans suffering from injuries or diseases not of service origin to occupy beds not needed for injuries and diseases that originated in the service. Now, however, the government is constructing numerous hospitals and providing many beds, solely to accommodate persons suffering from diseases and injuries in no way relating to service. The excessive demands that have heretofore been made for such socialistic service from the federal government have been and are leading to still further demands, and the end is not yet in sight. The situation is grave."

SPECIAL ARTICLES

INDIANA UNIVERSITY SCHOOL OF
MEDICINE

(Seminar April 25, 1930)

SARCOMA OF THE CLAVICLE

GEORGE GARCEAU, M.D.

This boy, fourteen years old, was admitted to the Riley Hospital complaining of a mass on the left clavicle. He had been well except for the usual childhood diseases. In January, 1924, he noticed a lump on his left clavicle about the size of a walnut. It was not painful. It remained about the same size until February 9, 1930, when, while playing basketball, he fell on his shoulder. For the next two weeks the tumor increased in size rapidly, was tender, and motion in the left shoulder caused pain. There had been no systemic reaction, as loss of weight.

The family history is negative except that a half-sister of the mother died of cancer.

The physical examination was negative except for the tumor of the left clavicle, about the size of a large hen's egg, which was hard, firmly attached and tender. Fairly large, bluish veins coursed over the tumor, left shoulder, and left side of the chest.

Red blood count, 3,860,000; hemoglobin, eighty percent; white blood count, 7,500; differential count, normal. Urine normal.

X-rays of this clavicle revealed a process involving the outer part of its inner half where there is both bone production and destruction, the former predominating and extending into the soft tissues; an appearance typical of osteogenic sarcoma. X-rays of lungs and mediastinum showed no signs of metastasis.

He was given six x-ray treatments at two-day intervals. The tumor has ceased to grow and the superficial veins are not nearly as conspicuous. He has gained about four pounds in weight.

Bone tumors are rather difficult to diagnose clinically, but the x-ray films help much. Sarcoma are mainly of two types: the cellular type, composed of round, oval or spindle cells, which occur chiefly at the ends of bones; the connective tissue type, composed of bone, cartilage and connective tissue. These tumors occur in children and young adults. The younger the patient, the more malignant the tumor.

Myelomata are of two types: the lymphoid and myeloid. The most frequent sites are the lower end of the femur, the upper end of the tibia, the lower end of the fibula, and the distal end of the radius. The growth of these tumors is slower than that of the sarcomata.

Fibrocystic disease consists of benign bone cysts and osteitis fibrosa cystica. These usually are of slow growth, multiple, and usually are demonstrated by a fracture. They occur in children mostly, but often are seen in adults. Femur, humerus, tibia, fibula, and phalanges are affected

in that order of frequency.

Osteomata are common tumors. These are of two types: the ivory type, very dense tumors found usually in the bones of the skull; and the cancellous type, which rise from the epiphyseal line and are made up of cancellous bone. These form slowly, but may attain a considerable size. The most common sites are the phalanges of the hands, the femur, and the tibia.

Chondromata and osteochondromata are slow-growing, cartilaginous tumors, usually multiple, which develop most frequently at the ends of long bones. The x-ray appearance of these is typical.

We believe this tumor to be a sarcoma, probably of the connective tissue or periosteal type, because of its location, its rapid growth, its density, and the x-ray films.

OBSTETRIC CASE

EARL WISEMAN, M.D.

This case, from the William H. Coleman Hospital, is a woman aged twenty-seven, who appeared first in the prenatal clinic of this hospital when, judging from the menstrual history and the size and height of the fundus, she was apparently about three and one-half months pregnant. When she was admitted to the Coleman Hospital April 4th, her condition was not alarming. The blood pressure was 95/60 mm. Hg.; pulse about eighty; respirations normal. Her general appearance was good. She had gone into labor about four hours previous to her admission. The pains became very severe. She called her family doctor, who, instead of taking her to a hospital, decided to deliver her in her home. He made two or three examinations and tried to dilate the cervix manually, but when she began to bleed from the vagina he became alarmed and decided to bring her to the Coleman Hospital.

After admission she was kept under constant, close observation. The blood pressure, temperature, and pulse were taken every two hours. The blood pressure remained what it had been when she attended the prenatal clinic. Her labor pains had stopped before admission and her abdomen was quiet. There were no contractions, but there was some soreness. There was no foetal heart heard, however, and we felt she had a dead baby and probably a ruptured uterus. This was not diagnosed definitely, however, until after the patient had been in the hospital approximately forty hours, when a vaginal examination was made and no foetal head and no membranes were felt. A laparotomy was then decided upon to deliver the foetus.

On opening the abdomen, the foetus, placenta, and membranes were found in the abdominal cavity along with several blood clots. A supravaginal hysterectomy was done and the abdomen closed. The recovery has been rather uneventful.

The past history of this patient was irrelevant except that two years ago she was delivered at

a hospital in Indianapolis after having been in labor approximately sixty hours. This was a breech presentation, but the presenting part had not engaged and the patient was pretty well exhausted, having had several examinations. Following a Cæsarean operation, she had a rather severe wound infection and probably a low-grade peritonitis. Ten days after the Cæsarean operation, she had a bowel obstruction for which she was operated again and drains placed in the abdomen. After that, she had what was probably a femoral phlebitis, which kept her in the hospital for about two months.

This case is presented because it demonstrates quite well why it is that, after a Cæsarean, the later deliveries necessarily are not Cæsarean, but should always be hospital deliveries. A patient who has had a Cæsarean should be where she can be delivered promptly in case the delivery is not normal, and it is considered by many, "Once a Cæsarean, always a Cæsarean."

Another interesting thing about this patient is the difficulty she offered in making a definite diagnosis of ruptured uterus. Usually a patient who has a ruptured uterus goes into rather marked grade of shock and the diagnosis is easy, but in this case it was not.

MEDICAL CASES

EDWARD BILLINGS, M.D.

The first case I wish to present from the department of medicine is one which illustrates a very interesting diagnostic problem, as well as shows one of the highest eosinophile blood counts that we have been able to find in recent literature.

This case is Mr. C., aged forty-five, married, and the father of seven children. He has had throughout his entire life exceptionally good health, aside from a few accidental injuries and an occasional attack of nausea and vomiting, the latter of which he says had no relation to the ingestion of food. Following the butchering of some hogs last December he, his wife and children suffered from some nausea and vomiting which, according to all accounts, subsided within a few days. In January, however, Mr. C. began to have nausea and vomiting, with pain of a rather indefinite character in the left upper abdomen. He began to lose weight, losing approximately fifteen pounds in five weeks. He has had no muscle pains.

Mr. C. entered the Long Hospital on March 3, 1930, complaining of the specific symptomatology I have just mentioned. Clinically we found very little, with the exception of some diffuse tenderness over the upper abdomen, a general irritability, and some evidence of an undurated and possibly an ulcerative process in the ileac portion of the colon, with a white blood count of about 22,000, of which approximately twenty percent were eosinophiles. Stool examinations and serial sections of the muscle tissues removed show nothing. At the present time the white blood count is

49,000, of which the eosinophiles are from seventy-two to seventy-five percent. This has been checked and rechecked by several competent observers.

A very interesting point has come to light during the study of this case; namely, that the patient's wife has a leukocytosis of approximately 20,000, with the eosinophiles ranging from nine to fifteen percent. There are no definite physical findings demonstrable in her case.

So far we have not made a definite diagnosis. We believe it is one of three things: either trichiniasis, a gastrointestinal parasitosis, or some sort of leukemia. The first we are unable to substantiate by microscopic examination of the muscle tissues; the second we are unable to substantiate by stool examinations and by stool cultures made through a sigmoidoscope; the third is still an open question.

The second case is an example of one of the clinical forms produced by *bacillus abortus* of Bang and the *micrococcus catarrhalis*. Mrs. F., aged thirty-five, married, and the mother of four children, has had, so far as we can learn, perfect health until October, 1928, with the exception of a few minor ailments during childhood and early youth. The present illness followed drinking the milk from a cow which recently had had an abortion. It began with rigors, chills, followed by a temperature of 104-105 degrees, marked perspiration, loss of weight, and general abdominal, chest and joint pains. During these attacks she awakens in the morning bathed with perspiration and with considerable malaise. These attacks occur at intervals which are irregular and last for two to three weeks. She has lost seventy pounds since the onset of the disease.

The clinical findings show a picture of cachexia and emaciation, and the presence in the blood of numerous erythroblasts. The white count is 6,000. The serology and blood chemistry are negative. Blood cultures are negative, and the agglutination tests for *bacillus abortus* and *micrococcus catarrhalis* now are negative. However, during a previous exacerbation of her illness these tests were markedly positive, as was confirmed by the Hygienic Laboratory at Washington. At the present time she is in a state of remission, with very little temperature, considerable muscular pain and atrophy, marked limitation of motion of the hips and knees, and less of the ankles and elbows. X-ray examination of the joints shows a little bone atrophy.

As to the treatment of this case, we are uncertain. We intend to utilize x-ray therapy to stimulate the formation of reticulocytes, and perhaps some of the various dyes and vaccines.

SURGICAL CASE

JOSEPH CLEVENGER, M.D.

This patient demonstrated little except that he is able to be here tonight, and shows something

of the rapidity with which some operative wounds will heal.

He came to the Robert W. Long Hospital on the 2nd of April. At that time he complained of inability to urinate, and pain and some tenderness in the lower abdomen. He gave a history of having had some difficulty in urination for the past three or four months, following an injury to the perineum that was immediately followed by some difficulty in urinating, frequency and burning. There had been several recurrences of that trouble.

On admission to the hospital he seemed to be rather anemic, and was unable to urinate. The bladder reached about half way from the pubis to the perineum. There was some tenderness in the lower abdomen and some irritability. For the past two days he has been much better. Two days before admission a physician had tried to catheterize him with a rubber catheter and, being unable to do so, used a metal catheter with some force. The following day he was all right, but the second day he had a return of the trouble and came to the hospital. We were able, with some difficulty, to pass a catheter. Only a small amount of urine drained, but considerable blood clots were passed. The size of the bladder, however, did not diminish, so that for a while we were uncertain as to the diagnosis. After an attempt at continuous irrigation without any decrease in size of the swelling, we came to the conclusion that the bladder was filled with blood clots. We therefore operated the patient a few hours later and upon opening the bladder removed some 450 cc. of blood clots, and inserted a catheter through the wound. We made no attempt at that time to pass an instrument through the urethra. This is now twenty-one days old. One week ago yesterday the drain was removed and we were able to introduce a catheter into the bladder, after the use of a filiform with a steel sound over the filiform. We have used the catheter about every third or fourth day. We now have the urethra about the size of a twenty-four French. Following the use of the rubber catheter it will be necessary to dilate the urethra to the size of twenty-five French before we allow the patient to go home. After he goes home he will return to the G. U. Clinic every week and have the urethra dilated with a steel sound. We will continue this from six to twelve months, depending upon the reaction and improvement.

Such cases come to this hospital from time to time, but this is the first case we have had in which we had to open the bladder to remove the clots. It teaches a good lesson on the use of metal instruments in the urethra. We feel that if an urethra cannot be entered with a silk or rubber instrument it is better to open the bladder than to force an opening.

The next case is a rather common type of case. This man was in the hospital last December for hypertrophy of the prostate, which had been diag-

nosed as hypertrophy and probable malignancy. On examination we found a prostatic abscess. With continuous catheter drainage he improved and we sent him home without operative procedure. He was well for one month after leaving the hospital, but shortly after that he began to show signs of trouble in his right side. He complained of some pain and soreness and general malaise and was unable to do his regular work.

Upon entering the hospital in the latter part of March, he stated that there was an indefinite mass present in his right side. We found on the right side a definite mass rather high up, which seemed to be fixed, but no signs of inflammation present except that the swelling was very sore. We kept him under observation for several days until there was no question but that the mass had increased in size. The white count rose, but he had no chills and only a very slight rise of temperature. About four days later we aspirated the swelling and obtained very foul-smelling pus, and shortly thereafter we opened a perinephritic abscess under local anæsthesia.

Perinephritic abscesses are rather common in all purulent infections of the kidney. They usually are cases of pyelonephritis. At the Riley Hospital a short time ago we had a youngster with a pyelonephritis which ruptured through the kidney into the colon. In the case of this man we are not sure where this abscess developed, or the source of its infection. There is some question whether the prostatic abscess which he had had several months previously, and which may or may not have been present when we discharged him from the hospital, can be responsible for this infection. He shows no involvement of the kidney at this time—no shadows of stones on the x-ray films, nothing but a few pus cells in the urine. We assume the suppurative process is subsiding. We expect later to have a pyelogram made to ascertain more definitely whether or not there has been severe kidney damage.

ACTIVE RICKETS IN TWINS

G. FURCH MEHLIN, M.D.

These twins were admitted to the Riley Hospital on March 31, 1930, with the complaint on admission of inability to walk, underweight, and evidence of early deformity of the extremities, chest and vertebræ. Because of a similarity of the symptoms, the twins will be considered together. The past history reveals that the twins were born prematurely at the Indianapolis City Hospital and that the mother died of toxemia after their delivery. No history of tuberculosis, mental diseases or exposure to contagious disease. Their birth weight was five pounds. They were placed on a feeding formula of modified milk and Maltose and have had occasional feedings of cereals and vegetables. Only for the past month have the pair had cod liver oil.

Examination: In general the physical examina-

tion of these true twins showed them to be poorly nourished, colored females, age twenty months, who weighed fourteen and eighteen pounds, respectively, or about nine pounds under the average normal weight for their age. One showed evidence of greater malnourishment and earlier bone deformity. They were extremely nervous and would not sit up unless supported. Their anterior fontanelles were approximately two and one-half fingers in breadth. The frontals and parietal bosses were slightly prominent. The average number of teeth are present. Ears, nose and throat are essentially negative. The chest shows a distinct rachitic rosary, and a definite Harrison's groove. Physical findings of the chest and heart otherwise are negative. Abdomen prominent; liver, one finger's breadth below ribs; spleen, not felt. A slight kyphosis of the vertebral column was noted. Both showed enlargement of the epiphyses, especially of the wrist. The twin of lesser weight showed a marked outward rotation of the hips, probably the result of sitting with her legs crossed.

The laboratory reports a negative urinalysis, slight secondary anemia and a negative blood Wassermann. X-rays taken of the long bones show evidence of active rickets.

Course: Both were placed on normal children's diets and were given orange juice daily and viosterol, fifteen drops daily. They were not allowed to sit up. Under three weeks of this routine they have gained approximately five pounds in weight. X-rays taken three weeks after admission showed marked healing of the bone deficiencies. The epiphyses are more distinct, the bone density has increased and the line of deposition of calcium phosphate is more prominent. This is much more marked in one case, which shows that two similar cases do not respond necessarily alike.

Summary: These twins show sufficient gross evidence of rickets to make them of interest, even though the condition exists in a mild form in the majority of infants. It is a disease of nutrition, chronic in nature, and, even though the important anatomical changes are formed only in the bones, it is a disease not only of the bones, but also of muscles, ligaments and mucous membranes. It is the result of a deficiency of calcium and phosphorus in the diet, which causes a lessened deposit of calcium phosphate in the bones. Inadequate sunshine and diet are the causes of the condition, and in turn they represent the cure. Ultra-violet therapy and cod liver oil or viosterol will prevent further advances. The prognosis as to recovery is good, but such children are especially prone to infectious diseases.

THE X-RAY IN OBSTETRICS

A. M. MENDENHALL, M.D.

My apology for talking about the x-ray in obstetrics is that it has become so very valuable an aid to us during the past two years. When

we built the Coleman Hospital two and a half years ago there was a question whether or not we should have an x-ray room. I maintained at that time that there were a number of problems in obstetrics for which we would be better equipped if we did have an x-ray department. Since that time considerable strides have been made in the use of the x-ray in our subject. The only thing we had attempted to use it for, for a number of years, had been the photographing of the pelvis, and the value of that even now remains rather problematical. The actual determination of the size of the pelvis entails considerable difficulty. Doctor Smith, who will follow me, will go more into detail. First of all, we want to know in obstetrics what is the size of the true conjugate. In order to determine this by x-ray we must have the film parallel to the plane of the inlet. Certain chairs and operating outfits have been devised, but they require marked torsion of the spine in order to x-ray the pelvis with the plate parallel with the inlet. That has not proven very satisfactory. We hope that in the near future some methods now being tried out will prove more satisfactory.

The positive diagnosis of pregnancy by the x-ray requires in most hands four months, and as a matter of fact, most obstetricians are able to diagnose pregnancy at four months without roentgenology. There are, however, exceptional cases where we cannot diagnose pregnancy definitely, and in those cases the x-ray has been a definite aid. Occasionally a writer has declared his ability to x-ray the foetus much earlier than four months, but most roentgenologists seriously doubt it, with the present technique at least.

The diagnosing of twins is relatively easy; rarely is a mistake made. The only mistake I have ever heard of being made—the roentgenologist reporting one baby when there were twins—should not have occurred, since on rechecking that plate it was evident that the roentgenologist should have seen more foetal parts; and, second, he had taken only one plate. He should have taken both an anteroposterior and a lateral plate before ruling out the possibility of twins.

Another problem is the diagnosis of polyhydramnios. We often have women with large abdomens and we would like to differentiate between polyhydramnios and a little baby, a large baby, or twins. The x-ray will tell you whether there are twins; they cannot, however, tell very accurately concerning the size of the baby; but sometimes the x-ray plate does seem to show polyhydramnios with a fair degree of accuracy. It may show a large uterine fundus with an area between the foetal parts.

In the diagnosis of monstrosities probably more progress has been made in the last three or four years than in any other department of x-ray obstetrics. They have found monstrosities so frequently associated with polyhydramnios that in well-regulated maternities they x-ray all cases of

polyhydramnios. Very often we find a deformed baby—a hydrocephalus or a spina bifida. When we know we are dealing with that sort of case we modify our obstetrical procedure accordingly. We certainly will not do a Cæsarean section on a woman who is proven to have a hydrocephalic monster in her uterus. Also in cases of placenta previa it has been shown clearly during the last few years that we very frequently have deformed babies—babies that are encephalic, hydrocephalic, spina bifida, or otherwise deformed, and the x-ray is a help there. Placenta previa is very often an emergency condition, and we do not wish to send the patient through a tunnel to another institution unless we are equipped there for delivery and the care of sudden hemorrhage. On the other hand, if the patient is bleeding only mildly and if it may be done with safety, the patient with placenta previa should be x-rayed in order to give us an opportunity to say what kind of child is in her uterus.

The diagnosis of hydrocephalus often gives us some concern. The roentgenologist can tell us a little of the size of the foetal head, and sometimes of the fontanelles. Sometimes we wish they could tell with a still greater degree of accuracy whether we are dealing with a hydrocephalic baby in utero, but that entails considerable difficulty. If the x-ray films do show wide-open fontanelles, then our suspicions are strengthened that we are dealing with hydrocephalus.

Death of the foetus in utero often can be recognized by roentgenology. If the baby is dead, there often is quite marked overlapping of the cranial bones (Horner's sign), and sometimes marked distortion of the shape of the head, particularly if it is a macerated foetus. You can understand readily how the x-ray might show the external shape of the foetal head. Of course, if we are attempting to diagnose death of the foetus in utero by x-ray, we are aided if the woman is in labor, since then there is an increase of the extracranial and a decrease of the intracranial pressures. Also, if the membranes are ruptured this sign will be even more positive, since then the uterine contractions will cause overlapping. I am sure Doctor Smith will tell you that that is not an entirely dependable sign, and I believe none of us use it as a dependable sign. Nevertheless, if I felt I had a dead baby from the clinical evidence and then Doctor Smith or some other competent roentgenologist showed that there was an overlapping of the cranial bones, I would be pretty certain that the baby was dead.

Another point, and one that I have not seen published, but to which Doctor Smith has called my attention two or three times, is the rather acute angulation of the spine of a macerated foetus in utero. We have seen a few cases where the spine was bent to a right angle.

The diagnosis of pregnancy by the injection into the uterine cavity of some opaque substance,

like lipiodol or iodophen, I am sure will strike you, as it does me, as a rather formidable diagnostic procedure, but it has often been done. A man in South America first did it. Some of his patients later had miscarriages; some did not. Doctor Rucker, of Virginia, did this in a series of cases and had miscarriages as a result, but he says no more than in any corresponding number of pregnancies. This, however, is not a scientific manner of reasoning. Doctor Miller, of Pittsburgh, tried this in a series of cases, but they found it was followed by too many miscarriages, and so discontinued it. To my mind, it clinically is wrong. Nevertheless, in some cases it may be justified. For illustration, we had a patient in the City Hospital last year who we were practically certain from the physical signs had an abdominal pregnancy; she had a hard cervix, and apparently, by vaginal examination, a small uterus. The x-ray showed a foetus, and we heard the foetal heart. Since several men questioned the type of uterus, we felt justified in throwing some lipiodol into its interior and taking an x-ray picture. At that time I was unable to find in the literature that this had been done. Doctor Smith tells me this afternoon that some German authority has done it. It is true that we see a number of cases of abdominal pregnancy, or suspected abdominal pregnancy, that are hard to diagnose. Then we need an x-ray picture that will show whether or not the foetus, of which we can get a perfect picture in the abdomen, is in the uterus, since an abdominal pregnancy will have a false membrane that will look like the uterine body surrounding the foetus. In such a case, we certainly are justified in injecting some lipiodol into the uterus and taking an x-ray picture.

Then the question arises as to sterility. Doctor Rubin, of New York City, probably has done more work than anybody else on the diagnosis of the interior of the uterus, especially of the Fallopian tubes and their patency, by throwing an opaque x-ray substance into the uterus. He has in some cases been able to show that both tubes were closed; in others he has shown that the solution had gone into the peritoneal cavity. Also, he has studied the tubes with a fluoroscope and has taught us a great deal about the physiology of the tubes and their periodic contractions. Thus it is that the x-ray has come to help us tremendously in the diagnosis of sterility.

In closing, for fear someone may question the dangers of the x-ray, I call your attention to the fact that we are not talking about the therapeutic use of the x-ray, but strictly its use as a diagnostic aid. It is practically inconceivable that you can do any damage to either mother or baby by any x-ray diagnostic procedure. I admit there is a great deal of danger in the therapeutic use of the x-ray to the ovaries of a woman who is pregnant or who may become pregnant. There are several authorities, among them Murphy, of

Philadelphia, for the statement that the woman who has had her ovaries x-rayed for therapeutic purposes and who later becomes pregnant is in danger of having weak, microcephalic, or otherwise defective babies as a result. There is, therefore, danger in the therapeutic use of the x-ray when a woman is pregnant that the foetus will develop imperfectly or incompletely.

L. A. SMITH, M.D.: Doctor Mendenhall and I were having a very good-natured argument this noon in regard to the dangers of therapeutic irradiation of the female pelvis and the prospect of damage to future pregnancies. There has been a great deal in the literature about that. Doctor Mendenhall has called my attention to a recent article, which I have not had time to read, in which Doctor Murphy warns that there is possible damage to the foetus in future pregnancies, but all do not agree. German and American writers have been much interested in this problem, particularly Dr. C. C. Little, of the University of Michigan. In 1926 a questionnaire was sent out to roentgenologists regarding the irradiating of patients who belonged to the families of roentgenologists, radiology diagnosticians, and assistants, and the result of that questionnaire was that the prospect of damage in case of future pregnancies was practically negligible. The whole question is being discussed at the present time and a great deal of experimental work is being done on animals. Of course, this proposition of irradiation should have a great deal of careful consideration, and should be weighed very carefully in case of women who are likely to become pregnant in the future. The persons who should be irradiated are those who are particularly unlikely to become pregnant in the future. That is fundamental.

RECOVERY OF THE HEART FROM VENTRICULAR FIBRILLATION CAUSED BY ELECTRIC SHOCK

PAUL HARMON, M.D.

We desire to report to you this evening some of the recent work which has been done on the experimental resistance of the ventricular fibres to electric shock. Data for this report have been gathered from various sources, but the most of what we shall report has been taken from two recent articles, one by Dr. Carl Wiggers, of Western Reserve University, and the other by Dr. E. R. Hooker, of Hopkins.

As we all know, the fatalities in electrical accidents are due to involvement of the heart, or to involvement of the respiratory centers, or of both. The involvement of the respiratory centers, of course, causes paralysis. The involvement of the heart possibly may cause paralysis, but the probable result is fibrillation of the ventricle. Paralysis of the respiratory centers should give as symptoms the continued beat of the heart, asphyxia usually, and, of course, cessation of respiration. If fibrillation of the ventricle is the result, the

condition should be continuation of respiration, but no visible heart beat, and no pulse. You might, of course, have a venous pulse because the auricles may not be involved in the fibrillation. If both conditions were present you would have complete inanition and the individual apparently would be dead except for a possible jugular pulse.

Fibrillation of the heart, either auricles or ventricles, is characterized by a synchronous contraction of all the muscle fibres involved, and the result would be the contraction of the whole heart, which would become a twitching, writhing mass of tissue. Of course, such beats are ineffective, the blood pressure would fall to zero, and circulation ceases.

Fibrillation may be produced by other means than electric shock. Occlusion of the coronary vessels also produces fibrillation, and mechanical stimulus, such as massage, may produce fibrillation of the ventricles. The underlying cause of fibrillation is not understood very well. The theory which physiologists accept generally at the present time is the one proposed first by Mins and later advocated by Gary, the so-called theory of circus movement. Ordinarily the contraction wave in a beating heart is so rapid and the period after it is so long that we feel that only one contraction wave may occupy the heart at one time. However, in fibrillation you have a shortening of the refractory period and a decrease in the rate of conduction, so that more than one wave may occupy the heart muscle at one time, thus producing circus movement. If you consider the ring of heart muscle (and, of course, the anatomical conditions here are, because of the arrangement of the tissues, good for circus movements) and stimulate that ring at any place in its circumference, ordinarily the impulse will start in both directions and when they meet they will be nullified. If, however, you have uni-directional production and the refractory period is short enough, an impulse which starts in the heart muscle in one way only may go round and round. Of course, that cannot be true unless we also have blocks which will keep this impulse within that particular ring or which will direct it in a certain way. So we have a picture of this circus movement occurring over the muscle fibres of the heart and producing this twitching, writhing mass. The fibrillation may be coarse or fine, depending on the circumference of the rings of tissue. In the normal heart if you had circus movement the ring would be larger than the heart itself, so that cannot occur. The size of the rings would be dependent upon the length of the refractory period and upon the speed of the conduction. If the conduction is very rapid you have a smaller ring.

Of course, this is not really the underlying explanation of fibrillation. It does not explain at all why electrical shock or occlusion of the coronary artery produces these circus movements. The spontaneous recovery from ventricular fibrillation

seems to depend entirely upon the mass of tissue which is involved. You find in the smaller animals spontaneous recovery from ventricular fibrillation—in the turtle, for example, and the guinea pig. In young babies at times you get recovery from ventricular fibrillation. Whether that is due to the size of the heart or to the age of the animal is not known. In adult dogs there is no recovery from ventricular fibrillation; it always causes death. Wiggers cites 208 cases which he recorded during his ten years of experimental work, with no recovery at all. In the isolated perfused heart of the animal you do get recovery, but this occurs only after about twenty-four minutes. In the intact animal death would supervene long before that time. In man there have been no verified recoveries from ventricular fibrillation. There are recoveries reported in the literature, but whether they had ventricular fibrillation or not has not been substantiated.

The voltage necessary to cause fibrillation of the ventricles is at times surprisingly low. It depends upon the resistance of the tissue, and naturally upon the contact and the position of the electrodes. If the electrode be introduced directly to the heart the shock will produce ventricular fibrillation. In dogs it is possible to do this with ten or fifteen volts. In man there are many instances where, under proper conditions, ventricular fibrillation with death has resulted from electric shock caused by a house current, when sitting in a bath tub or something like that. Apparently the high voltages are more likely to involve the nervous system, and the lower voltages the heart. That is, with the lower voltages you get involvement of the heart alone, and with the higher voltages you get involvement of the heart and also the nervous system. There has been some recent work by a man who has had opportunity to take electro-cardiograms of criminals who were electrocuted. Of course, the voltage in that case is rather high. He found in practically every case fibrillation of the heart.

With our present widespread use of electricity electrical accidents are common, and since fibrillation occurs with these lower voltages, and since fibrillation is merely a functional disturbance without injury to the tissue, then it seems to me very important to try to find out whether it is possible to alleviate this condition. I, therefore, consider this recent work by Hooker and Wiggers of very great importance. Doctor Hooker first experimented by using the isolated, perfused heart, for obvious reasons—ease of manipulation for one. The heart is perfused as usual through the coronary vessel. He produced fibrillation of such a heart by means of the faradic current; also by means of a direct current of nine volts and twelve to seventeen milliamperes. That is a rather low voltage, but applied directly to the heart it always produced fibrillation.

In the literature you find many procedures and

many drugs which are reported to relieve ventricular fibrillation, and Hooker in his work tried practically all of these very carefully. I will enumerate some of them, but not all. It was supposed at one time that ventricular fibrillation was a hyperexcitable condition. Now they know it is the opposite. It was supposed that by cooling the heart the fibrillation could be stopped. He tried that many times, but without result. Lately there has been some work done in Switzerland using extracts of the conductive system of the heart. This man thinks that the conductive system of the heart produces hormones that are responsible for the regular beat of the heart, and that in fibrillation you have a possible destruction of these hormones. He proposed that an extract of the conducting system of the heart might be effective in fibrillation. Hooker tried this, but without result. Then he tried quinidin sulphate, which has been used, I understand, by clinicians frequently in case of auricular fibrillation and with possibly good results. The idea is that quinidin sulphate lengthens the refractory period, and probably stops the circus movements. Hooker, however, found that the injection of this into the coronary vessel, and directly into the chambers of the heart, seemed to have no effect. He is not positive as to whether or not it might have a deleterious effect, but he knows it does not stop the fibrillation. He used a number of other drugs, all of which had been reported as being effective in fibrillation of the ventricles. Finally, Hooker and Wiggers turned to potassium chloride as the agent to use. Of course, it has long been known that if potassium chloride is perfused through the coronary vessel of the isolated heart you get its immediate stoppage. When it is introduced into the vessels of the vibrating heart, the heart stops; and when it is washed out with Ringer's solution or calcium chloride the heart begins to beat again and you always find that fibrillation has stopped. That is, the beat when it returns is absolutely normal. That never fails. Of course, the important thing is to stop completely the heart with potassium chloride and then to start it by washing out the potassium chloride and perfusing it with calcium chloride. To apply this successfully in the intact circulation is an entirely different proposition. In the intact animal there are possibly four methods of procedure. You can inject the potassium chloride intravenously into the pericardial sac, into the ventricles of the heart, or you can infuse this solution into the end of one of the large arteries like the carotid in the hope that it may reach the coronary artery. Since in order to have the potassium chloride effective it must reach the muscles of the heart, one would not think that the intravenous injection, or the injection of it into the pericardial sac would be likely to be effective, and such proved to be the case. Hooker and Wiggers both tried these methods of approach and obtained absolutely negative results.

The intracardial injections into the ventricles, however, gave some promise. Of course, the Thebesian vessels run from the ventricle into the musculature of the heart. Hooker found that when he injected into that ventricle of the intact animal, or at least intact except that the chest was open, five cc. of fifteen percent potassium chloride, he could get stoppage of the heart after a time. However, the stoppage generally did not occur quickly enough to be very promising, his recoveries upon the injection of calcium chloride were not very promising, and about all the experiment showed was that potassium chloride could be absorbed. Wiggers used this same method at different times and obtained slightly better results. He obtained twenty-six recoveries out of forty-three cases that he injected with potassium chloride. He injected fifty milligrams per kilo of a five percent solution into each ventricle and then washed it out with the same amount of five-percent calcium chloride. He then massaged the heart. With direct massage of the heart he got recovery, but without massage he got no recoveries. Of course, that is not often possible, and if it is possible it is a rather dangerous procedure. Possibly the difference in the results of these two men depends upon the fact that Hooker did not massage the heart and Wiggers did. Massage probably would help to establish the circulation and drive the solution into the coronary vessel.

Hooker turned to the last method of approach, that is, the injection of the potassium chloride into the central end of the carotid artery, through a cannula, in order that he might, if possible, get enough fluid into the coronary artery to be effective. The procedure was as follows: He anesthetized the animal with morphin and ether, cannulated the carotid and in many cases also the femoral artery, and attached a manometer. He placed moist electrodes on each side of the ascending thoracic arteries and passed through them 110 volts of direct current. Invariably, after about two seconds, he got fibrillation. At different times after fibrillation had been induced he injected the calcium solution under pressure of 150 millimeters of mercury. The pressure is very important because the higher the pressure, the more likely the fluid is to go into the coronary artery and the less likely to go into other parts of the arterial system. He injected first thirteen cc. per kilo. of a 0.5 percent of potassium chloride in salt solution, plus a small amount of epinephrin. That is a large amount of fluid. In the case of a ten-kilogram dog, that would be 130 cc. Almost invariably he soon detected inhibition. He allowed this to continue for one minute and then profused calcium chloride, ten cc. per kilogram of a .023 percent in salt solution. He then stopped that infusion for a short period while he injected one cc. of 1-1000 adrenalin, and then fifteen cc. per kilo. of more calcium chloride. The amount of fluid used is, of course, enormous—130 cc. of the potas-

sium and twenty-five of the calcium chloride solutions. The reason he used epinephrin was to cause vaso-constriction. He used this procedure on twenty animals. In twelve the thorax was open; in eight, closed. He obtained complete recoveries in nineteen of these animals. One of the animals is now a pet in his home. The technique is a little more difficult with the thorax closed because it is hard to determine when the heart stops, because if the fibrillation is not stopped completely the injection of calcium chloride will not be effective. Resuscitation is also more difficult the longer the heart has been allowed to vibrate. The intervals he used were two and eight minutes. Of course, if the heart, after being in fibrillation longer than eight minutes, should recover, the life of the animal probably would not be saved, because it has been shown that the central nervous system of dogs cannot stand anemia for more than about eight minutes and the time is presumably about the same in human beings. The maximum time without injury to the central nervous system which they obtained was about fifteen minutes, and the average around seven to eight minutes. Hooker had complete recovery in two dogs where the heart had been in fibrillation for eight and a half minutes, but one of these animals apparently developed a slight defect in vision which was not noticed before the operative procedure, which would indicate some destruction of the tissues of the brain.

One of the many disadvantages of this method—and, of course, it is still experimental and may remain experimental—is the large amount of fluid which it is necessary to inject. It produces considerable hydræmic plethora. He tried to obviate this by introducing a sound into the carotid artery, trying to get it so near the aortic arch that the fluid could be gotten into the coronary artery, but his results were not good. He also tried a hypodermic needle, but with no results. The cannula seems to be the only feasible method.

As long as we are not completely familiar with the underlying cause of fibrillation, methods like this are the only methods of attack that we have on this problem. Hooker realizes that this method is rather complicated and difficult to apply, but he feels that, since no method previously proposed has proved at all effective, he possibly has made some advance in the control of fibrillation.

Euripides had just passed the examination in the World War draft. He said to the examiner: "Boss, Ah'd like to ask one favor, now that yous goin' ter put me in de army."

"And what is that?" patiently asked the examiner.

"Don't put me in de cabalry."

"What's your prejudice against the calavry?"

"Boss, w'en Ah's told to retreat, Ah don't want to be bothered with no hoss."

—*Kablegram*, May, 1930.

DEATHS FROM DIPHTHERIA

April of this year showed a slight increase in diphtheria deaths over the preceding month. Clark county had its second death for this year; Knox and Vanderburg counties their fourth death; LaPorte and Tippecanoe their first, and Sullivan its first and second—a total of seven. We should like to call the attention of the authorities of the Knox, Sullivan and Vanderburg counties to the fact that they are running up very high rates and that the situation is one that calls for rather drastic action. If Indiana is to repeat the low rate attained in 1929 it will be necessary to get control of these epidemics in the tier of counties down in the pocket—Sullivan, Knox (Gibson has had no deaths this year) and Vanderburg. Four of the seven deaths for April came from these three counties, and ten of the forty-nine deaths for this year have occurred there.

Diphtheria deaths by counties for April and for the first four months of 1930 are given below:

| COUNTY | TOTAL DEATHS SO FAR IN 1930 | DEATHS IN APRIL 1930 |
|------------|--------------------------------|-------------------------|
| Allen | 1 | 0 |
| Clark | 2 | 1 |
| Clinton | 1 | 0 |
| Delaware | 2 | 0 |
| Dubois | 1 | 0 |
| Elkhart | 2 | 0 |
| Greene | 1 | 0 |
| Howard | 1 | 0 |
| Jay | 1 | 0 |
| Knox | 4 | 1 |
| Lake | 3 | 0 |
| LaPorte | 1 | 1 |
| Lawrence | 1 | 0 |
| Marion | 9 | 0 |
| Monroe | 2 | 0 |
| Montgomery | 1 | 0 |
| Morgan | 1 | 0 |
| Perry | 1 | 0 |
| Randolph | 1 | 0 |
| Sullivan | 2 | 2 |
| Tippecanoe | 1 | 1 |
| Tipton | 2 | 0 |
| Vanderburg | 4 | 1 |
| Vigo | 1 | 0 |
| Warrick | 1 | 0 |
| Wayne | 1 | 0 |
| White | 1 | 0 |
| | 49 | 7 |

DIPHTHERIA MORBIDITY AND MORTALITY IN ADJOINING STATES

The *Illinois Health Messenger* of May 15, 1930, calls attention to the great need of immunization against this entirely preventable disease and at the same time gives us some very interesting information concerning Indiana and neighboring

states. We were pleased to see that Indiana is at the bottom of the list in morbidity for the first quarter of this year and last year.

Diphtheria cases per 100,000 population for first quarter:

| STATE | 1929 | 1930 |
|--------------|------|------|
| Illinois | 12.4 | 13.3 |
| Michigan | 11.5 | 9.4 |
| New York | 14.7 | 7.4 |
| Pennsylvania | 9.0 | 9.0 |
| Ohio | 7.1 | 4.6 |
| Indiana | 5.1 | 4.0 |

Figures for the city of Chicago are interesting:

| | Deaths per 100,000 |
|--|-----------------------|
| 1886-1895 (average of ten years before antitoxin) | 140 |
| 1896-1905 (average of ten years after antitoxin) | 42 |
| 1920-1929 (average of ten years after toxin-antitoxin) | 14 |

Of particular interest is the fact that last year the city of Chicago had a rate higher than the average for the ten-year period (1920-1929). Chicago rates have shown an upward trend since 1924.

Mortality from diphtheria in Chicago (ten years since toxin-antitoxin came into use):

| | | | |
|------|------|------|------|
| 1920 | 23.1 | 1925 | 8.0 |
| 1921 | 24.3 | 1926 | 7.4 |
| 1922 | 19.8 | 1927 | 14.2 |
| 1923 | 12.6 | 1928 | 14.4 |
| 1924 | 7.4 | 1929 | 16.0 |

Diphtheria is predominantly a *city disease*.

T. B. R.

In a southern Indiana town two doctors, A and B, engaged in a fist fight which kept Dr. A. in the hospital for a day or two and disfigured one of his eyes for a longer period. The story goes that Dr. A., being very jealous of Dr. B., who was recognized as the more skillful of the two, possessed a rather loose tongue and had no hesitation in more or less publicly denouncing Dr. B. in uncomplimentary and even damaging accusations concerning not only ability but personal conduct. Finally Dr. B. overheard Dr. A. say in the presence of a small company that a certain patient deserved to die if she elected to employ Dr. B. as her physician. This resulted in Dr. A. receiving a beating at the hands of Dr. B., and the public applauded. It may be undignified for physicians to engage in a fistic encounter, but there are times when patience ceases to be a virtue, and a trouncing of a traducer goes farther than anything else in establishing quietness. However, there is something wrong with a profession that tolerates within its ranks a known slanderer. We well can afford to get rid of a few human skunks that now bathe in the membership sunshine of a reputable medical society but are well known to be devoid of good ethical and moral standing.

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JUNE, 1930

EDITORIALS**X-RAY DIAGNOSIS OF CHRONIC APPENDICITIS**

The use of the x-ray in the diagnosis of chronic appendicitis has been of distinct value in a group of cases presenting many difficulties in diagnosis and in which errors in diagnosis are the rule rather than the exception. The chief symptom in this group of cases is lower right-sided pain, more or less constant and with occasional mild exacerbations. The patients usually are women who are under weight and poorly nourished. The diagnostic problem will resolve itself into a decision as to whether the appendix is responsible for the pain.

The evidence obtained by the use of the x-ray is both direct and indirect. The indirect evidence may be and often is of greater value than the direct. By indirect evidence is meant the x-ray examination of other organs such as the kidney, stomach, colon and gall-bladder. The kidney probably is more frequently responsible in this group of cases than it is given credit. Pyelitis, kidney or ureteral stone, ureteral stricture and kinks, frequently form the background for a train of symptoms that erroneously may be ascribed to the appendix.

Catheterized bladder urine free from pus or blood, and a flat-plate negative for stone, will exclude kidney pathology with symptoms resembling chronic appendicitis. If pus or blood are found the ureters should be explored and pyelograms taken.

The direct evidence which consists of the fluoroscopic examination of the barium-filled appendix and plates made at stated intervals following the ingestion of the opaque substance, has been the subject of much debate and difference of opinion. Continued experience with an expert roentgenologist leads one to the conclusion that much valuable information can be obtained in the diagnosis from the direct evidence afforded by the x-ray. This evidence consists of the ability to locate fluoroscopically the position of the appendix, and having located it discover the point of tenderness. Obviously when one discovers the point of tenderness in the lower right quadrant, the organ responsible for the pain may or may not be the appendix, which fact only can be determined by

visual location of the barium-filled appendix. This I regard as the most reliable x-ray evidence of a chronically diseased appendix. Failure to fill or to visualize or filling but imperfectly are too uncertain to be of service.

After all the evidence is in the wise physician will be cautious about making a diagnosis of chronic appendicitis.

THE DETROIT SESSION

This year's session of the American Medical Association is to be held in Detroit the week of June 23rd to 27th, inclusive. The Association not only is the largest in the world, but there is no medical association that does so much constructive work in the interest of members of the medical profession, individually and collectively, and in the interest of medical education and public health.

The various features of the annual session are so arranged that it is possible for anyone to take advantage of the feature in which he is particularly interested. Thus the fifteen scientific sections record the rapidly increasing progress of the specialties, and the work of the sections is a reflection of the great progress that has been made within the last few years. These fifteen sections, as pointed out by the *Journal of the A. M. A.*, (May 24th) provide more than three hundred papers in all the special medical fields. Here the contributors make available to the general practitioner the advance methods of therapeutics that are presented otherwise only before small organizations devoted to the medical specialties. The great clinics of the past have given way to practical instruction to small groups. The scientific exhibit has grown from a few demonstrations to more than 150 exhibits and demonstrations scheduled for the Detroit session. Not only will group exhibits on fractures, varicose veins and biochemical methods be available, but a number of the leading pathologists of America will demonstrate with fresh tissue the changes that occur as a result of disease. For those who still wish the stimulus of clinical lectures, there is provided a special series by eminent leaders in surgery, internal medicine and the various specialties.

A very interesting feature of the session is what formerly was called the commercial exhibit, which in former days was devoted largely to the presence of detail men representing manufacturers of pharmaceuticals who were there primarily to sell doctors products of unknown composition and uncertain action. "Today, through the growth of the Council on Pharmacy and Chemistry, the Council on Physical Therapy, and the Committee on Foods, products will be demonstrated that have had their composition declared, their claims verified and their usefulness approved. Moreover, all the vast paraphernalia of modern medical laboratory diagnosis, physical treatment, roentgenologic, chemical, pharmacologic and biologic ther-

apy will be available in a technical exhibit planned primarily not to sell but to teach."

Then there are the unusual entertainment features, the opening assembly, the foreign guests, and this year presentation of badges to all living ex-presidents. To many physicians the most valuable feature of the annual session is the opportunity to renew old friendships and to make new contacts. As the *Journal of the A. M. A.*, May 24, further says, "it is not surprising that the annual session of the American Medical Association has come to be the outstanding medical event of the year for the majority of the American medical profession. The attendance year after year reaches and surpasses previous peaks for the section of the country in which the session may be held. No ballyhoo is required to indicate to physicians what they may gain by their attendance. It is a foregone conclusion that the attendance at the Detroit session this year will be far beyond the attendance of the session held there in 1916, even though there is an economic stringency. Physicians who ever have attended one of these annual sessions attend subsequent sessions, realizing that the return on the investment is beyond that which may be obtained by investment in any other manner for self-improvement."

Indiana physicians, always enterprising and progressive, will attend the Detroit session in large numbers, for they recognize the fact that no medical organization ever offers them such a scientific and social treat as afforded by the great American Medical Association.

CHRISTIAN SCIENCE DESPOTISM

It is a well-known fact that the Christian Science organization not only maintains the most effective publicity agency known, and manages to secure more free favorable advertising than any other known enterprise, but is able through a species of tyrannical influence to suppress anything that is a criticism of any phase of Christian Science teaching or practice. The manner in which this censorship is effective is indicated by the experience of Dr. Morris Fishbein, editor of the *Journal of the A. M. A.* whose quite recent public talk in Indianapolis, most of which was devoted to the Christian Science fallacy and the life of its founder, was so censored by the newspapers that no mention of Christian Science was made in the press reports although the lecture otherwise was given considerable publicity. Even the lay society under which Doctor Fishbein appeared apparently was brought under the influence of the tyrannical dictation of the Christian Scientists and in opposition to the direction of Doctor Fishbein changed the title of the address so that it would not appear to reflect on the Christian Scientists.

We, too, have been visited on more than one occasion by a committee from the Christian Science organization, once being visited by a delegation from the mother church in Boston, and

in every instance an attempt was made to convince the editor of *THE JOURNAL* that he not only should refrain from printing anything opposed to Christian Science, but make amends for what already had been said. We are told that a newspaper that through any slip publishes anything derogatory to Christian Science is visited promptly by a Christian Science delegation, usually headed by some merchant who is a Christian Scientist, and the insidious threat made that if the newspaper does not wish to lose some of its profitable advertising it will refrain from publishing anything derogatory to Christian Science teaching or practice. That merchants also are tyrannized is evidenced by a report from a merchant of our acquaintance who informs us that upon his refusal to have printed notices of Christian Science lectures posted in his show windows he was visited by two or three of his customers who pointed out that in refusing to lend his show windows to the Christian Science church he was offending some of his best friends and most profitable customers. This was followed by telephone messages from various people claiming to be customers of the store who expressed themselves as being grieved because he seemed opposed to Christian Science.

Within the past year a book concerning the life of Mrs. Eddy and the Christian Science Church has come from the press of Charles Scribner's Sons, and the book furnishes an exposure of the misrepresentation, deceit and dishonesty practiced by Mrs. Eddy and the church she founded, as based upon authenticated facts. The Christian Scientists have attempted to suppress not only the publication of the book but its sale to the public, and the extent to which this warfare has gone is illustrated by what has occurred in Los Angeles where display advertising by the publishers appeared in the daily papers reading as follows:

"We have been forced to take off our tables all copies of 'Mrs. Eddy,' by Edwin Franden Dakin."

"This is from a bookseller who writes also that, because of pressure from individuals who are trying to smother this biography, he has been obliged to return his stock of copies and compelled to write a letter of apology to 'two agencies' in his city. Personally this bookseller endorses the book."

"This is a sample of many similar letters which come to us from coast to coast. The result is a situation almost incredible in a free country. * * *

"Throughout almost eighty-five years of publishing, we have been able to say of our books, 'On sale at all book stores.' We regret that, in this one case, we must qualify this statement."

"If you can't get a copy of 'Mrs. Eddy: The Biography of a Virginal Mind,' from any available bookseller, we will mail you a copy postpaid to any part of the United States on receipt of \$5."

"CHARLES SCRIBNER'S SONS,
597 Fifth Avenue, New York City."

It is reported that within three hours following the display of Dakin's book in the windows of the stores of Los Angeles a storm of protest went up from the Christian Scientists, with the result that the leading stores withdrew the book from sale. Some of the book departments of Los Angeles stores eventually declared that they did not sell the book and would not sell it or order it. As the editor of *California and Western Medicine*, for January, 1930, says: "The book itself has received the highest praise as a work of real, unbiased biography by the best reviewers in the

country, such as *The New York World*, *The Springfield Republican*, *The Saturday Review*, *The Nation*, *The Boston Herald*, *The Carnegie Library Magazine*, REPRESENTING THE UNMUZZLED PRESS. "The feature of this affair that is most interesting is that the subtle influence of the Christian Science Committee can in a large measure throttle the speech, reading, and the thought of a million and a half of Los Angeles people who are in no way in sympathy with them. * * * No doubt there are hundreds of thousands of Catholics, Jews and Protestants who would like to know this story. * * * The medical profession does not wish to interfere with Christian Scientists in their religion and in the care of their own personal bodies. It should be concerned vitally, however, when the Christian Science organization or any other organization attempts to interfere with the sanitary or health control of the community as such, or when it attempts to interfere with the free speech, free thought, or free reading of the people of a country such as the United States of America."

What has occurred in Los Angeles has occurred in other communities in the United States. As the editor of *California and Western Medicine* further says, "the perusal of the letter (Scribner's) will give a shock when it is learned that a book brought off the press by a reputable publishing house and having the sanction of the United States Government to go through the mails, seemingly should be barred practically from the sales counters of stores. Certainly, if such book and department stores do such an un-American thing out of slavish or other fear of one group of citizens whom they think to be averse to having the biographical volume read by other Americans, then it is proper that such stores should appreciate that such actions on their part will be given publicity. Such publicity among the two camps of for-and-against citizens will permit such stores to receive what they presumably seek, namely, the benefit from the business accruing to them from the larger purchases made by whichever group of citizens is seemingly favored through such partisan espousal of interest."

We might add to this delicate insinuation by saying that if business interests are going to be influenced by and threatened with boycott by a handful of tyrannical Christian Scientists, it may be possible that turn about will be considered fair play.

CABOT IS OUT

The lay newspapers and the medical journals have carried the announcement that Dr. Hugh Cabot is no longer dean of the medical department of the University of Michigan. The reasons are not hard to find, for in medical affairs Michigan long has been flirting with paternalistic and socialistic tendencies, and these have not suffered at the hands of Cabot. The surprising thing is

that Cabot was tolerated so long, but of course, while the medical profession years ago learned to consider Cabot as a stumbling block in preventing the advance of socialistic ideas in the practice of medicine, it has been quite another thing to get a lay board of regents of Michigan's great university to see the light.

Our readers may remember that nine years ago, or more specifically, in *THE JOURNAL* for October, 1921, we published an editorial entitled "Dr. Hugh Cabot's Medical Socialistic Scheme for Michigan," in which it was pointed out that the new dean of the University, judged by his published speeches, showed strong leanings toward socialistic medicine, and that he gave evidence of attempting to encourage Michigan to adopt state medicine. Doctor Cabot came back with a rejoinder in which he disclaimed any idea of trying to induce Michigan to adopt state medicine, but, as we pointed out in our answer, he offered no proof to contradict all that we had said concerning his tendencies *as based upon his own speeches and conduct*. It would seem that the medical profession of Michigan tolerated Cabot because forced to do so in view of his secure position as dean of the medical department of Michigan University, but evidently sufficient pressure and influence finally has been brought to bear so that now, after a lapse of years, Cabot has been dethroned.

The socialistic and paternalistic ideas that have been pestering the medical profession of Michigan, through the medical department of its University, are similar to ideas and practices that are troubling the medical profession of some other states which likewise have great universities with medical departments that presumably are governed and controlled by well-balanced executives. Perhaps what has happened in Michigan may throw a scare into some of the medical men in high places in our teaching institutions, and, if so, more than Michigan will be benefited by the Cabot incident. We believe that Cabot was dismissed for continuing the very things for which we openly criticized him nine years ago. At that time the editor of *THE JOURNAL* said, in answering Doctor Cabot's denial: "I am in favor of everything which tends to improve health conditions and ameliorate the suffering of the sick and disabled, but I am opposed to all practices, under whatever guise, that tend to pauperize the community, to stifle individual initiative and medical practice, and unjustly trample upon the rights and privileges of individual members of the medical profession. Hospitals, whether federal, state or municipal, should be open to people, irrespective of social position, but the medical and surgical services should be gratuitous only to the worthy poor and charged for to all others consistent with their ability to pay. The record of your University Hospital (Michigan) and your statements, which latter you now say have been misconstrued, are

not in keeping with the plan mentioned, and that is the reason for the criticism to which you take exception. The medical men of Michigan have certain inalienable rights and one of them is the right to practice medicine without the unfair and unjust interference with their efforts to earn an honest livelihood. The University of Michigan has trampled upon this latter mentioned right in not only a ruthless manner but in a manner which true economists believe to be detrimental to the public weal. I believe that I am safe in saying that practically all of the visionary but impractical if not wholly vicious schemes which tend toward the socializing of medicine owe their origin to medical men, erstwhile leaders in the medical profession, rather than to any lay person or lay organization. It is the so-called leaders like yourself who start innovations, sometimes with good intentions but more often with selfish ends of one kind or another in view. Not infrequently the innovations are not for the best interests of all concerned, and at such times criticism and opposition is justified. I hope the day has arrived when every right-thinking doctor in Michigan will use his voice as well as his vote for registering opposition to the various schemes for socializing medicine, and that will mean offering vigorous protest to some of the plans that some of us believe you have sanctioned and supported."—(THE JOURNAL, November, 1921.)

We are trustworthily informed that Cabot did not mend his ways, but continued as he started out in the early years of his career as dean of the medical department of the University of Michigan, and he has but received his just desserts in dismissal. We agree with the editor of the *Illinois Medical Journal*, who, concerning the Cabot dismissal, said, "Doctor Cabot's successor must be chosen with care. He must be a man worthy of his high position as educator and executive, and blessed with the intelligence and diplomacy to set a value upon the good will and the good opinion of the medical profession in the state of Michigan first, and secondly the other states of the Union."

THE "SELECTIVE LIST OF PHYSICIANS"

It is a human frailty to want to belong to the elect, and physicians perhaps are no weaker than others in this respect, but, in their perfectly laudable attempt to obtain recognition for professional attainment, they not infrequently bite at the specious bait thrown out by commercial enterprises that promise to put the ambitious physician in a coveted place through the payment of a price for the service. Some of the enterprises that offer to increase the reputation and standing of physicians by placing them in directories or reference books supposedly containing the names of only the elect are little short of swindling games, and for the reason that in most cases, no matter who you are, you get in if you pay the price and you do

not get in if you do not pay the price. A physician may be flattered by being informed that he has been selected among a very limited number to have his name appear in some kind of a "who's who" book, but he will be wise if he investigates before he lends his support to any such enterprise, and particularly if it calls for the payment of any money either in advance or subsequent to the publication of the book. If the book is at all trustworthy it will sell on its own merits, and, in fact, be in demand, but most of such enterprises are not trustworthy and are commercial from beginning to end. They profit by subscriptions received in advance and the book has no further sale. If there is a demand for a selective list of physicians it is well met by the directories of such organizations as the American Medical Association, the American College of Surgeons, the American College of Physicians, and the membership lists of the high-grade special societies.

"SURGICAL BABBITTS"

Under this heading the *American Journal of Surgery* vents its feelings on those so-called surgeons who descend upon the European clinics *en masse* and from their actions get American surgery in wrong with the medical and surgical profession of European countries. The groups consist, not of representative American surgeons, but of "very mediocre practitioners," not even outstanding in their own countries. Continues the *American Journal of Surgery*, "They have done no studying since graduation from medical school, they read almost nothing, neither do they do any research, add to the literature, visit home clinics or take postgraduate courses. They enjoy large practices or have made a fortune in real estate or the market. * * * Entprising members of the profession of the go-getter type organize clubs, groups, societies much on the style offered by any well-known travel agency to visit foreign countries and see 'all the clinics.' Thirty to a hundred medical Babbitts who have no idea what it is all about and care less 'sign up' and in a gay mood depart for distant shores. * * * Herd-like they would descend on a place and overrun it, strain their necks to see all, and were mainly interested in taking moving pictures of everything; the operators, the nurses, in the 'queer' looking uniforms, etc."

The well-qualified surgeon, like the true traveler, does not attract attention. Much has been written about the vociferous tourist, and one or two in a shipload can do more to give this country an unenviable reputation in the minds of the European than a whole ocean liner full of orderly, quiet citizens of the United States can do to redeem that reputation. Those who would visit foreign clinics with a seriousness of purpose would do well to consider carefully such groups as the Editor of the *American Journal of Surgery* describes. The independent traveler, whether a phy-

sician looking in on foreign clinics or merely a traveler in a nonprofessional capacity, will get a great deal more satisfaction than by being one of a crowd.—*Jour. Mich. State Med. Soc.*, April, 1930.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely free to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve you.

ONWARD to Detroit for the A. M. A. session, June 23rd to 27th, inclusive. A rare scientific and social treat awaits you.

THE Toledo (Ohio) Medical Association will attempt to check self-exploitation among its members. We shall be interested in knowing how they are going to go about it and a later report as to results.

SEVERAL Indiana physicians have reported having received literature from the Physicians' Protective Casualty Company, in Chicago. The Iowa State Insurance Department says that it is a fake insurance proposition and urges physicians to steer clear of it. Indiana physicians will be wise if they heed the warning.

IT is time for the officers and committees of the Indiana State Medical Association to begin the preparation of their annual reports to be published in the September number of THE JOURNAL. These reports should be in THE JOURNAL office by August 15th if possible, and certainly not later than August 20th.

"TALK about hard times," said one doctor, "why, I cannot even afford a new suit of clothes, and my wife is patching my trousers that I wear every day." "That's nothing," said another doctor, "my wife is cutting my trousers down and using them for golf knickers to save buying golf suits for herself."

DR. CHEVALIER JACKSON, noted bronchoscopist of Philadelphia, declares that the bronchoscope is not used often enough to detect cancer of the lungs, air passages and stomach, and that the bronchoscope is an invaluable aid in the treatment of such conditions inasmuch as radium may be ap-

plied to the afflicted part through the bronchoscope.

AGAIN and again we have reminded county medical society secretaries that the members of their respective medical societies expect them to send to THE JOURNAL items of interest. Members of county medical societies also are reminded that they, too, can send in news notes and personals that they think will be of interest to the general medical profession.

A WELL-KNOWN physician who will attend the Detroit session of the A. M. A. announced to a party of friends, in all seriousness, that he had engaged hotel accommodations in Windsor, Canada, because he desires to be where he can get good English mutton chops, cooked in English style. Why the alibi? Well, mutton chops do go well with good English ale.

INDIANA should have a very large representation at the annual session of the American Medical Association to be held in Detroit, June 23rd to 27th, inclusive. Detroit is easily accessible from all parts of Indiana by rail or motor and Indiana physicians should avail themselves of the greatest opportunity of the year to profit in a professional way from the most varied and comprehensive program of instruction in all the medical specialties.

THERE is an increasing tendency on the part of county medical societies to establish credit-rating and collection bureaus for the purpose of improving business conditions in the practice of medicine, and the tendency seems thoroughly justifiable. No one is more imposed upon than the physician. He gives credit to those who are not entitled to it and especially those who lie about ability or willingness to pay. A trustworthy credit-rating and collection bureau will aid materially in solving his problems.

ONE of our exchanges says that Wayne B. Wheeler forced prohibition upon the country before the people realized what it was all about. Will history repeat itself and socialized medicine be forced upon the people before they know what it is all about, and without any effort on the part of the medical profession to prevent such a catastrophe? Does the great American Medical Association, as an association, hear the alarm clock which has been ringing and which should awaken the Association to duty?

IN Texas they prosecute and put out of business the manufacturer of a fake chicken remedy. We wonder if they ever prosecute the manufacturer of fake remedies for human beings. Something tells us that Texas, like most other states, is more interested in protecting chickens, cattle and hogs than in protecting human beings. The authorities

may deem it their duty to prosecute the vender of a fake cure for hog cholera, but it never occurs to them to prosecute the venders of the fake consumption or cancer cures.

SENATOR SMOOT has introduced a bill in Congress to suppress tobacco manufacturers in their misleading and deceptive advertising. He denounces the advertising campaign of the tobacco interests as "unconscionable, heartless and destructive attempts to exploit the women and youths of our country." He calls the advertising "an orgy of buncombe quackery and downright falsehood and fraud." He is aiming at the cigarette manufacturers, Lucky Strikes more particularly, and we hope that he accomplishes his purpose.

THOSE physicians who are running blindly over this country and Europe in attempts to get a smattering of postgraduate training would do well to send to the New York Academy of Medicine and procure from that source a synopsis of approved opportunities offered in New York City for postgraduate study in the clinical specialties. It is not necessary for the serious-minded student to chase over to Europe for postgraduate training, for not only can the training be obtained in this country but oftentimes it is better than it is in Europe.

"If the medical profession is to retain the confidence of the public and its own self-respect and its ability to attack with a clear conscience the blurbs of patent medicine venders and quacks, it must control the poor judgment and enthusiasm of its own members." Thus says the *New England Journal of Medicine*, March 6, 1930, in discussing the premature exploitation of the California cancer cure. The inference is drawn that premature announcements are very frequently due to over-enthusiasm of investigators or their colleagues.

THE Fort Wayne Medical Society is taking a very active interest in the coming session of the Indiana State Medical Association to be held in Fort Wayne the last week in September. Owing to the fact that the scientific program begins at one o'clock on the afternoon of the first day, it is expected that a very large attendance will arrive Wednesday morning. The noted out-of-state speakers will be on the program Wednesday afternoon, and Wednesday night the local profession will entertain the members and their wives, with a promise on the part of the program committee that Fort Wayne will furnish real entertainment.

JUST what constructive work has the Woman's Auxiliary of the Indiana State Medical Association done? We are asking for information. There is a real and urgent need for the kind of work that physicians' wives can do in helping the med-

ical profession in disease prevention work, to say nothing of influencing the public to shun quacks and quackery of every kind. We are not saying that nothing has been done by the Auxiliary, but our readers ought to know what has been done, and we shall be delighted to encourage the auxiliaries in every consistent way, for they can be a mighty force for good. Right now they can be of great help in the diphtheria prevention campaign.

IN this day and age when there are countless agencies of many kinds trying to discredit the medical profession it is a little disheartening to note that there is such a frequent tendency on the part of many physicians to discredit their confreres and without ample cause. It certainly is discouraging when a reputable physician who is trying to play the game honorably and fairly discovers that his confreres are trying insidiously to undermine his standing with individuals and the public. What we need right now is a little more of the stick-together spirit. There is too much laxity in our ethical conduct, and too little of the spirit required if we follow the injunction, "Do unto others as you would be done by."

CHIROPRACTIC is dying and in some localities is positively dead, according to the *Journal of the Iowa State Medical Society*, published in the state which gave birth to chiropractic. The president of the American Bureau of Chiropractic is reported as having said that it gave him a heart ache "to see the great buildings in Davenport, Iowa, nearly empty and that great school almost without pupils." The commenter then says that it will be only a few years until chiropractic will be recognized only as an historical curiosity. "In the meantime, however, we find that some thirty-six states and the District of Columbia have legalized the practice of chiropractic, illustrative of what may be accomplished by concerted financial support in lobbying, and in lavish advertising."

O. B. NESBIT, M.D., of Gary, Indiana, has an interesting article in the *Journal of the A. M. A.* for May 10, 1930, concerning scarlet fever and diphtheria immunization in the public schools of Gary. He reports that five years' experience with immunization against scarlet fever by the Dick method in the Gary schools indicates its effectiveness in lessening the number of cases and also the deaths. A reduction of twenty-nine percent in the number of cases of scarlet fever, and of fifty-five percent reduction in the number of deaths would indicate that scarlet fever prevention is much in advance. Even more satisfactory results have been secured with diphtheria immunization. Diphtheria toxoid instead of toxin-antitoxin has been used in Doctor Nesbit's diphtheria prevention work.

IN a recent radio talk a representative of the New York State Department of Health made the following statement: "If three injections of toxin-antitoxin, given a week apart, were administered to every child under five years of age in the state, and if all infants as they attained the age of six months were protected similarly, diphtheria eventually would be counted a medical curiosity."

That statement is just as applicable to Indiana as it is to New York. At present there is a campaign on in Indiana to carry out the preventive measures recommended in New York and other states. It is the duty of every physician to join in this campaign, not only by giving the preventive treatment whenever called upon to do so, but going out of his way to recommend treatment to the public.

THE JOURNAL constantly is receiving newspaper clippings showing the extent to which physicians, some of them occupying high places in the profession or in the community, will exploit themselves in the newspapers, always with the idea that a superior grade of service is being rendered to the public. It has occurred to us to get a scrap-book and file these newspaper clippings sent to us so regularly by indignant confreres of the physicians who exploit themselves in the lay press. Such a scrap-book ought to afford very interesting reading, and if some of the articles are reproduced in THE JOURNAL along with suitable editorial comment perhaps it will be easier for medical societies to discipline members who have so little regard for ethics and good taste.

A FEW months ago we offered a criticism of the Academy of Nursing of Fort Wayne, an enterprise that purports to give instruction by mail. At that time we said that we did not think the enterprise was worthy of patronage, and quite recently we have received a letter which charges open fraud on the part of the Academy in securing money from a poor widow under false pretenses. We suggest that the reputable physicians of the state use their influence to prevent gullible women, young or old, from patronizing any correspondence school of nursing, and in particular to avoid falling into the clutches of any correspondence school that makes extravagant promises as to results, or concerning the awarding of lucrative positions at the completion of the course. Nursing cannot now and never will be taught by mail successfully.

THE JOURNAL goes to approximately three thousand physicians in Indiana. In many instances it is the only medical periodical received, probably because it is easy to obtain it through membership in the State Association. *The Journal of the A. M. A.* has considerably less than one-half of this circulation in Indiana, and we believe that the representation is not sufficient. There ought

to be at least 2,500 physicians in Indiana subscribing for the *Journal of the A. M. A.*, the largest and by far the best medical journal in the world. Furthermore, those Indiana physicians who are practicing a specialty or are interested in a specialty should subscribe for one or more of the special journals published under the auspices of the American Medical Association. Keeping abreast of the times means reading good medical periodicals, and the state and national journals head the list as acceptable reading.

SOME physicians seem to pride themselves upon lack of business ability, and the great majority are quite willing to take what is handed them by some organization conducted for profit. In this connection we note that the Michigan State Medical Society, in an endeavor to secure the cooperation of insurance companies in the payment of just fees for valuable information concerning prospective clients, has met with a rebuff on the part of some insurance companies, notably some having offices right here in Indiana. When will medical men cease to play into the hands of commercial interests? Already medical men are altogether too charitable in donating their services to the worthy poor and some that are not so worthy, so why be imposed upon by concerns organized for profit.

THE Eastman Teaching Films, Inc., a subsidiary of the Eastman Kodak Company, of Rochester, New York, has cooperated with the American College of Surgeons in producing a number of motion picture films as an aid in the teaching of medicine and surgery and in furthering scientific knowledge. These films are available for use by medical organizations, and may be depended upon not only for scientific accuracy and suitable for teaching purposes, but they have been prepared with special care to guard against undue personal advertising and commercialism. The American College of Surgeons is in no way involved in the financial consideration and does not expect to receive any return whatever except the satisfaction of doing something for medical progress. How much better it will be for medical societies to make use of such films rather than the many and varied films offered by commercial firms who patently are commercializing the enterprise.

A SO-CALLED evangelist connected with a tabernacle in Fort Wayne, and said not to be representing any particular religious organization, is exploiting himself over the radio as a miracle healer. A choice bit of buncombe that he got out of his system a few Sundays ago was to the effect that as a result of his prayer God restored eight inches of bone, with resulting instantaneous healing, to a woman who had lost the bone through an operation. Another false claim was that he had through prayer effected an "instantaneous cure of

cancer that had been pronounced inoperable and incurable by physicians." Just why radio stations will permit such deceptive and misleading stuff to be broadcasted is hard to understand. The pathetic part of it all is that a good many ignorant people are deluded into believing that there may be some truth in the statements broadcasted. Another feature of it which disgusts us is that this deception and fraud is carried on in the name of religion.

WE hope that the "Hospital Number" of the *Journal of the A. M. A.* of March 29th was read very generally by medical men all over the country. There is much food for thought in the first five papers published in that number inasmuch as a great deal is said concerning the cost of medical care and its relation to hospitals and medical men. The inconsistencies and injustices in connection with the plan under which we at present operate are considered carefully, and the constructive criticism offered ought to bear fruit. Both hospitals and physicians are urged to cut out not only frills but superfluous service to the end that the cost of medical care will be less without doing the slightest injustice either to physician or hospital. This can be done, and it remains to be seen whether hospitals and physicians will adopt voluntarily means and measures to correct present evils or be forced to do so in a very unpleasant way by the public.

IF paternalistic or socialistic medicine makes any further headway in the United States it will do so as a direct result of the aid of prominent members of the medical profession and a general apathy of the entire profession concerning the whole subject. Uplifters of one kind or another are wielding the baton and the public is dancing to the music and the medical profession offers little objection. A great principle is involved, and right now socialistic tendencies in medicine are on the increase. Eventually the individualistic practice of medicine will be a thing of the past unless something is done to stem the tide. To our notion the problem is one that merits the serious consideration of the medical profession, and we hope that through some action of the A. M. A. House of Delegates at the Detroit session, or the Board of Trustees, the matter will have more attention than it has received in the past. Many of our prominent educators need a heart-to-heart talk and a taste of discipline by our medical organizations.

THERE isn't one out of ten physicians who is not attempting tonsil surgery, and in many instances the surgery should be designated as mutilating. Admitted that a lot of incomplete and bad tonsil surgery is occurring every day, which is inexcusable, yet the greatest condemnation should be heaped upon the heads of those physi-

cians who foolishly operate in the homes of the patients, sometimes miles from the operator's office, and leave the patient immediately after the operation. Severe and in one or two cases fatal hemorrhage has occurred in Indiana under such circumstances, and no doubt there are similar cases in other states. A tonsil and adenoid operation is a major operation and should be so considered. No doubt the operation can be done in the home, and with good results, but it is an unwarranted piece of carelessness on the part of the physician to leave that patient without appropriate attention and without being at the quick call of the operated.

WE are not surprised to note that the National Better Business Bureau is complaining about the character of some of the advertising copy put out by large advertisers like the American Tobacco Company which is condemned for distasteful and objectionable advertising of Lucky Strike Cigarettes and Cremo Cigars. It is hoped that the National Better Business Bureau will accomplish something in its fight for honest advertising. We refused a full page of Lucky Strike advertising which would have netted us a neat sum, and we based the refusal on the ground that the advertising copy was not only misleading but vicious in its implied teaching. We are very sorry to note that some medical journals with far less cause than we have for the acceptance of even slightly questionable advertising, accepted and we believe still are carrying the Lucky Strike advertising. Well, we would rather be safe than sorry, and we would rather have clean advertising pages and a thin bank balance than soiled advertising pages and a fat bank balance.

WE continue to receive newspaper clippings showing the extent to which reputable medical men will go in exploiting themselves in the daily newspapers. Occasionally the articles indicate that the publicity given the physician in connection with some so-called wonderful operation or medical cure may have been due to the misguided efforts of some enterprising reporter to expand news, but for the most part the substance matter in the article shows the unmistakable earmarks of having been given to the press by the physician who has not been averse to having his name and his reputed skill exploited in print. The better class of newspapers avoid using any physician's name in connection with cases, and probably there is no newspaper editor who will not, if so requested, give directions to his newsgathering staff to avoid giving publicity to the names of any physicians in connection with sickness, accidents, or operations. To court newspaper publicity in exploiting professional skill is, to say the least, in bad taste, and it always results in more or less criticism by confreres, as the receipt of newspaper

clippings and disparaging comments from physicians testifies.

PHYSICIANS are imposed upon shamefully by being compelled to give expert testimony on the witness stand without any compensation other than the ordinary *per diem* allowance for ordinary witnesses. This rank imposition is brought about through the action of lawyers and judges who, if the requirement applied to themselves, would fight it, if necessary to the highest court in the land, in order to get a favorable ruling. The lawyers would not permit one of their members to be treated as members of the medical profession are in this matter of expert testimony. If a lawyer is summoned as a witness concerning confidential matters in relation to his client's affairs, he very promptly would refuse to give either facts, opinions or advice, and a judge would sustain him in his rebellious attitude. In our judgment the principal reason that we have been imposed upon is that the medical profession as a profession has not objected to such unfair treatment and carried the matter to the highest court in the land in order to secure a favorable decision. It seems to us that there is no difference in the position of lawyers and physicians when it comes to giving expert testimony, so why make any discrimination?

THE reputable physicians of Toledo, Ohio, are paying thirty-five dollars per year as medical society dues, and evidently they are satisfied with what they are receiving for the expenditure. The society furnishes confidential credit information bulletins, Better Business Bureau membership, Merchants' Credit and Adjustment Company service and membership, Doctors' Service Bureau, and the state and national organizations interested in an executive office service which cooperates with the common problems of public health and professional practice. The local society takes special interest in public health problems, and it maintains a speakers' bureau for the purpose of discussing public health information before luncheon clubs, radio and press. It also manages postgraduate courses for members, bringing talent from anywhere in America in order to furnish the best instruction. In looking after the business side of the practice of medicine the society dues pay for an organized effort to procure compensation for members, and accomplishes more than could be accomplished by any individual member in working by himself. After all, as the *Bulletin* of the Society says, "it isn't so much what you pay—it is what you get for what you pay."

No doubt many medical editors have been pestered by the letters and circulars from Howard Ambruster, of New York, an importer who has been complaining about the quality of ergot that comes into this country and who threatened dire

vengeance to all who have been responsible for what he has been pleased to term their criminal commercialism. We had occasion to say in a former number of THE JOURNAL that we believed that Ambruster had a personal axe to grind, and a government report just received tells the story of Ambruster's attempt to prove legally that ergot imported into this country is adulterated or misbranded.

"The Court of Appeals affirmed the action of the District Supreme court, which had dismissed an injunction proceeding brought by Howard Ambruster, a New York importer of ergot, to prevent the officials from admitting into this country crude ergot of rye which he alleges was illegal and unfit for use, and which would be in competition with importations made by him. Mr. Ambruster claimed that he imported and has in store large quantities of standard ergot of rye and that he would suffer great loss if the ergot in question were allowed to be put on the market."

Thus it would seem that Mr. Ambruster's attempt to corner the ergot market and reap a rich harvest in consequence has ended in failure.

AT the recent medical congress held in Japan, Prof. Theodore Axenfeld, of Freiburg, Germany, stated that tuberculosis of the inner structures of the eyeball is much more common than generally believed and is not given recognition in England and the United States to the extent deserved. He contends that, while the original bacilli equally insinuate themselves into the eye and the respiratory organs, yet pulmonary tuberculosis and inner ocular tuberculosis do not accompany each other inasmuch as the bacilli either cause the former or the latter alone, and even though pulmonary tuberculosis grows worse it never affects the eyes. Professor Axenfeld said that in some countries, such as England and the United States, oculists consider cases of intraocular tuberculosis as very rare, and this, he said, is due largely to laying too much importance on the so-called focal infection when the causes of disease are not clear, thus limiting attention to teeth, tonsils, sinuses, etc. The inflammation of the iris, ciliary body and choroid has been proved often to be due to tuberculosis through experiments made by Professor Stock, of the Freiburg Clinic. A form of intraocular tuberculosis referred to by Professor Axenfeld is a recrudescence hemorrhage in the eye which attacks juveniles, and he gave some of the Japanese ophthalmologists credit for making valuable contributions in their researches concerning this new disease.

YE gods! After all that is being said concerning the iniquities of the free clinic, open to all who may come, we learn that in certain Indiana cities there are physicians of good repute who, perhaps with the idea of exploiting themselves, not only are encouraging but actually giving their services to free clinics, advertised as such, without

any special consideration of the ability of patients to pay. No logical argument has been presented to show that reputable physicians should render free professional services to those who can pay something for the service. Medical attention is a necessity on a plane with food, clothing and shelter. There is no good reason why physicians should bear the burden of supplying any necessities for the poor. Medical men always have and always will be charitable, giving freely of time and skill for the benefit of the sick poor, but why should they be called upon to bear the whole of a burden which belongs to the community? It is time for medical men to quit pussyfooting in relation to this subject, and insist upon a consistent and fair solution of the problem. In the final analysis there are exceedingly few persons, except in the slums of the great cities, who cannot pay something, be it ever so small, for relief in case of illness, and they should be required to pay what they can pay without serious hardship. In no other way can we limit dependency and pauperism with its increased cost to the community through taxation.

DID it ever occur to the readers of *THE JOURNAL* that lay newspapers and lay magazines quite generally are publishing articles by lay writers and persons who have the M.D. degree but never have practiced medicine, concerning the attitude which medical men should take toward the lowering of the cost of illness? In many of the articles an attempt is made to show that medical men are overpaid, and generally are unworthy of confidence. Isn't it about time for organized medicine to quit turning the other cheek. We are getting just a little peeved to note the frequency with which lay interests try to lay down laws and regulations concerning the practice of medicine and even concerning the personal conduct of physicians. Medical men have their faults, and one of the greatest faults is bestowing charity where it is not deserved, and not often enough resisting the interference of the rank outsiders who would like to establish a code of propriety for us. We need some fundamental adjustments and readjustments, but we scarcely need help from outsiders. *THE JOURNAL* has been free in its criticism of the profession, but we hope that the criticisms have been constructive, for they have been so offered in the hope of bringing about a betterment of conditions. However, we resent having outsiders offer criticism that we would not offer and that we know is unjustified and unfounded.

Nor long ago we called attention to an announcement in the newspapers to the effect that Indiana soon would have a company organized for the purpose of furnishing medical, surgical, dental and hospital services at a flat rate per year, and that a contract similar to that issued by insurance companies would be furnished patrons.

Evidently the scheme is in operation, for circulars now are being received by lay as well as professional people in some of the Indiana cities, in which the plan is unfolded in brief and a request made that applications for further information be made direct to the company. Of particular interest to the medical profession is the statement in the announcement to the effect that except in emergencies the person holding the contract or policy may select his or her physician, dentist or hospital for the rendering of the necessary services and the company will pay the charges. That may sound all right to the patron, but it remains to be seen how it works out with physicians, surgeons, dentists and hospitals, for if we are not very bad guessers an attempt is going to be made to force physicians to accept whatever remuneration the company elects to pay, and probably the company as a lay and profit-making institution or enterprise will attempt to establish a fee bill that is ridiculous in its niggardliness. We do not believe that the enterprise will succeed, but if it does succeed to the slightest extent it will be due to the cupidity of the members of the medical profession who lend their support to such flagrantly unfair profit-making schemes and attending imposition upon the medical profession.

As a militant organization the Methodist church takes the prize. It dabbles with a vengeance in politics, prohibition, public morals, and many so-called uplift enterprises. Some of the work engaged in by the church is truly commendable, though it is a question if the fanatical way in which the leaders go about the matter is really beneficial, for it certainly stirs up antagonism even among those who otherwise would be supporters. Certainly some of the misrepresentations and even dishonesty practiced by some of the church leaders proves a very serious setback to progress of the causes for which they are fighting. As an example we need look no further than to the episode that occurred in Portland, Oregon, last summer when one Clarence True Wilson, head of the committee on temperance and public morals of the Methodist church, saw fit to malign unjustly the great American Medical Association. Furthermore, we long have held to the opinion that religion and religious enterprises suffer in consequence of the outside activities of churches. As one observer says, "the Methodist church represents a political party more than it represents a religious organization." If the Catholic church, as a church, openly meddled in politics and public morals as much as the Methodist church does, what an awful howl would go up from the Protestant ministers and a goodly portion of the members of their flocks. The truth of the matter is that religious influence everywhere is on the wane as a direct result of antagonisms created by certain church leaders who dabble in a dicta-

torial way in politics, business, and many other things not connected with the spread of the gospel.

THE rank and file of the medical profession gets a little peeved when some physician constantly boasts to the public as well as to his confreres that he is a Mayo Clinic product or that he received his training at the Mayo Clinic. We recognize the fact that the Mayo Clinic furnishes opportunity for excellent instruction and experience, but it is a debatable question if the physician turned out by the Mayo Clinic is any better equipped than physicians turned out by other postgraduate institutions or medical centers, providing those who have availed themselves of such advantages have applied themselves intelligently. However, the public has grown to see a halo over the Mayo Clinic, and in consequence there are a certain number of physicians who have had some training at the Mayo Clinic or stood on the outside and admired the magnificence of the Clinic building who have attempted to capitalize their experiences. Recently we ran into one of those birds who said to one of our fellow passengers, "Evidently you do not know who I am. I graduated from the Mayo Clinic, where the finest training in the world is given. You should consider yourself fortunate in having my services." Oh, heck! Applesauce!

We are satisfied that the Mayo Clinic organization is very much dissatisfied with the conduct of some of those who have had training at the Clinic, and no doubt occasionally the Clinic suffers real embarrassment through the action of some of the pompous men to whom we refer. This does not help matters, and the egotists who are capitalizing their connection with the Mayo Clinic justly deserve the condemnation and censure of the reputable medical profession in any community.

THE dues of the San Francisco County Medical Society are fifty dollars per year. The average Indiana doctor would die of heart failure if his local medical society raised the dues to twenty-five dollars per year, let alone boosting them to fifty dollars as in San Francisco. Perhaps some may say that fees and incomes are larger in California than they are in Indiana, but we have reason to believe that such is not the case. The editor of the *Compend of Medicine and Surgery* (San Francisco) for February, 1930, in discussing the question of dues, compares what the physicians of San Francisco pay and what the members of certain trades unions pay. Thus the musicians pay four dollars per year, agree to lay off one day out of each week to allow the other fellow out of a job to earn a livelihood, then two percent of their regular minimum weekly salary, plus two percent for national defense fund. That makes it pretty expensive to belong to the union. Then there are the chiropractors and some other pseudo-

medical cults that assess their members from fifty to two hundred dollars per year. Various Masonic lodges have dues of from ten to twenty-five dollars per year. Social clubs are kept up through dues of from one hundred dollars upward, the amount depending upon the prominence, size and facilities offered by the club. Most physicians belong to some kind of a country club and think nothing of paying dues of from one hundred to one hundred fifty dollars per year for privileges that are not used except during the summer months. If they play golf, that adds to the burden. If a bootlegger is patronized the expense will be higher. However, though the doctor will pay constantly for luxuries and unnecessary features that enter into his daily life, he howls like a stuck pig when his local or state medical society talks about increasing the dues by perhaps one dollar per year, making a total of less than ten dollars in the average society and less than twenty-five dollars in the largest cities. If he had supported his local and state medical associations more handsomely, in financial and other ways, much could have been done to improve the economic and social position of the average physician, and we would not now be fighting for our very lives in consequence of the growing menace of socialized medicine.

WELL, well! At last we really are getting somewhere in our efforts to curb the progress of socialistic tendencies in the practice of medicine, for Cabot has been removed from the deanship of the University of Michigan and we have just learned that a judge of the superior court of the state of California recently has given a decision to the effect that corporations cannot practice medicine. In rendering his decision the judge in effect says that a corporation employing a physician on a stated salary, with perhaps an additional bonus if the business justifies it, cannot under the law governing the operation of a corporation engage in the practice of medicine, for such an act would be unlawful and place said corporation in a position whereby it might be possible legally to cancel or annul the franchise of the corporation. It also was pointed out by the court that, whereas the workmen's compensation act compels all employers to furnish medical and surgical aid to the injured in the course of employment, that condition does not offer any reason for the corporation to engage in the practice of medicine. It only requires that the corporation shall furnish the medical aid of a physician or surgeon, and it is not necessary to form a corporation to furnish the physician for medical aid. The judge commented further as follows: "If in the last analysis corporations are allowed to practice medicine as a general proposition it is the opening wedge to the commercialization of the practice of the learned profession of medicine and permits the creeping in of many unethical and uncontrollable factors which the law

has heretofore rigidly sought to avoid. One of the main objections to a law allowing corporations to practice medicine would be unquestionably the inability of the state to control the practice of medicine by a corporation as it does control it now under the medical practice act, as each member of the profession comes directly under the practice act and the corporation herein does not. Unprofessional conduct on behalf of the corporation could not be reached, such as aiding or betraying a professional secret, advertising, or offences involving moral turpitude and many others too numerous to mention. Unquestionably, if the corporation does not come within the provisions of the medical practice act, it would be immune from its penalties or provisions, therefore it is important to the welfare of the people of the state of California, and hence the importance of prohibiting the corporation from the practice of medicine as a corporation and engaging in that business with agents for profit."

OUR Committee on Civic and Industrial Relations of the Indiana State Medical Association well can consider some of the economic questions that are up before the medical profession for solution, and one of them is ways and means of preventing hospitals and medical men from being imposed upon by the victims of accidents, particularly automobile accidents. As it is now the victim or victims of an automobile accident, frequently occurring away from home, are rushed to the nearest hospital and a surgeon called. Very frequently no arrangements are made for paying either the hospital or the surgeon, even though the accident victims may carry indemnity insurance. If the injured persons happen to be financially able to pay any and all bills, the hospital may be paid, but the surgeon may be overlooked. More often the injured persons are judgment-proof, and even though they collect indemnity from some insurance company they forget their obligations to the hospital and the surgeon. If indemnity is secured as a result of legal action, the prosecuting attorney gets his fee, for the indemnity usually is paid to him, but again the hospital and the surgeon are overlooked. Some plan should be adopted whereby this common imposition can be stopped. Both the hospital and the surgeon are serving in an emergency, and no question is asked the injured people or the friends as to whether compensation for the services will be forthcoming or not, and it is the height of ingratitude on the part of those receiving the services not to pay the reasonable fees charged, and yet ingratitude plays such a large part in these episodes that some precaution should be taken both by the hospital and surgeon as a matter of common justice. Our Committee on Civic and Industrial Relations should consider this subject, as also the growing tendency on the part of insurance carriers to scale down the fees for medical

and surgical attention in spite of increased cost of education, training and equipment of the physician and even increased premiums for indemnity protection which add to the profit made by indemnity companies. There are some other questions of economic interest that could be considered carefully by our Committee on Civic and Industrial Relations, and in fact there never has been a time when such committee was more needed than now.

WE notice that those who graduate this month from some of the universities and colleges will be required to pay a fee of five dollars for a diploma. The institutions no doubt need the money, and little enough is paid for education, but it does seem a little inconsistent to ask a student to pay for a certificate testifying to the world that he has completed the prescribed courses. Inasmuch as you can't eat the diploma and it probably will serve no other purpose than to collect dust in someone's attic, the five-dollar charge seems to be wasted so far as the student is concerned. Furthermore, if the student refuses to pay the fee, perhaps he might be refused a certificate, but what does that matter? An institution cannot take away from the student what he has gained through his four years of study. We are reminded of a true story pertaining to a university student of many years ago who now is a very brilliant foreign correspondent in the employ of some of the leading newspapers of the United States. At the completion of his senior year, and just prior to graduation, he wrote an article for the newspapers in which he criticized constructively some of the scholastic rules and regulations of his university. It is said that he was at once called before the faculty and told that unless he retracted or modified what he had said in his newspaper articles he would be refused graduation and a diploma. The truth of what he had said was not questioned. He replied, "Go the limit if you please, but you can't take from me the education that I have received at your institution, even though you refuse to graduate me, and any certificate testifying to the fact that I have finished my work is worth absolutely nothing to me from a practical standpoint. Furthermore, I am not sufficiently interested in your threat even to tell you, as I can do, that legally you can be compelled to give me my diploma now that I have finished successfully the prescribed work." At that he walked out, but the faculty very wisely sent him a diploma, perhaps influenced by a knowledge that the young man had just accepted a very lucrative position with a leading New York newspaper which might discuss the incident unpleasantly. The young man, belligerently inclined, is still offering constructive criticism of far greater importance than that of his student days, and would be a credit to any institution that has a right to claim him as a grad-

uate. We know it is the custom among some institutions to charge for a diploma, but we think it is a good deal like making a separate charge for electric light in the classroom, or shade on the campus. Why not charge enough in the general matriculation fee to cover such extras?

THE editor of THE JOURNAL has just returned from a three months' tour of the Orient and from observation and many conversations with Americans and Europeans living in the Orient has arrived at some rather definite conclusions concerning the missionary work that should be done in China. What China needs more than anything else is *medical* missionaries who will teach the Chinese something about sanitation and give simple rules concerning public and private health. They also need instruction on how to procure and distribute the natural resources, and food in particular. One frequently sees a Chinaman plowing with a crooked stick, pulled by one or more coolies, and notes that human excreta often is used for fertilizing the soil where vegetables are grown, thus indicating why there is a scarcity of food in certain localities and why the death rates from dysentery, typhoid and diseases of malnutrition are so high. China has natural resources that should be developed under the guidance of those who can instruct. Medical missionaries have done a great work in China and deserve an enormous amount of credit. The purely religious workers have made scarcely a dent in China, despite all the time, effort and money that has been put into the missionary business. We doubt if the Chinaman ever changes his religion, and we don't know any particular reason why he should change it. We asked a Chinese guide, who could speak fair English, where he worshiped, and he promptly replied, "I am a member of the Presbyterian church. I go there regularly." To a question as to where his family went, he said that they, too, went to the Presbyterian church. That Chinaman is listed as a devout Christian, and yet later we found him secretly worshiping in a Buddhist temple and making his offering of coppers in the usual way. The average so-called Christian Chinaman is a Christian only because it pays him to be such. Secretly he worships as his ancestors have worshiped. His religion is older than the Christian religion, in many respects is just as good as the Christian religion, and as it serves him well there is no particular reason for changing it. On the other hand, he does need the civilizing influences which will teach him how to make use of his natural resources, how to create and distribute food products, and how to live in accordance with modern ideas of sanitation and public health. We have nothing but praise for those religious denominations that have sent into China educated, active and progressive medical missionaries, and who have established hospitals, schools and industries. We have no compliments to pay to strictly relig-

ious missionaries, of which there are countless numbers in China, for we do not believe that they have accomplished any good worth mentioning, and we are inclined to place considerable credence upon the general consensus of opinion among foreigners in China that religious missionaries do more harm than good by fomenting trouble. In other words, we believe that our work in China should be to teach the Chinaman how to live rather than how to pray.

MEDICO-LEGAL DEPARTMENT

By ALBERT STUMP

ATTORNEY FOR INDIANA STATE
MEDICAL ASSOCIATION

Question: What is the law in regard to the rights of osteopaths in Indiana, particularly with reference to the giving of anæsthetics, antiseptics and narcotics and the practice of surgery and obstetrics?

Answer: In 1901 a law was enacted to license osteopaths. That act was amended in 1923 to enlarge their rights. The act so amended reads as follows:

"*Osteopathy, License to Practice.* The said board shall grant certificates which shall authorize the proper clerk to issue to the holder thereof a license to practice osteopathy, surgery and obstetrics, as hereinafter provided. Such certificates shall be issued on the same terms and conditions as others, except that the applicant therefor shall not be required to pass an examination in *materia medica*, nor shall the college from which he presents a diploma be required to conform to the standards fixed by the said board as to instructions in *materia medica*, but such college shall so conform in all other branches of instruction. The holder of such license when issued shall have the right to practice osteopathy, surgery and obstetrics and to administer anæsthetics, antiseptics and narcotics. Any person practicing osteopathy in the State of Indiana under a license issued prior to the taking effect of this act, and who desires a license to practice osteopathy, surgery and obstetrics under the provision of this act may, upon application and the payment of one dollar, obtain a certificate from the state board of medical registration and examination that he is entitled to such license by presenting to said board the said license possessed by him at the time of the taking effect of this act together with an affidavit that he is the legal possessor of such license and is the person mentioned therein. Such certificate when presented to the clerk of the proper county shall entitle the holder thereof to a license to practice osteopathy, surgery and obstetrics and such license when issued shall entitle the holder thereof to all of the rights provided in this section."—(1926 Burns, Section 12245.)

It will be noted that this act gave to one practicing osteopathy in Indiana under a license issued prior to 1923 the right to obtain a license to practice osteopathy, surgery and obstetrics merely upon his application and the payment of one dollar to the State Board of Medical Registration and Examination. There was no requirement prior to that date as to standards to be maintained in surgery and obstetrics by schools teaching osteopathy. Under the grandfather clause of that act there could have been a license obtained without the showing of any educational preparation for the practice of surgery and obstetrics. All colleges teaching osteopathy are required, since the act took effect, to maintain the standards of instruction fixed by the State Board of Medical Registration and Examination in all branches of instruction except in *materia medica*.

The right to administer anesthetics, antiseptics and narcotics is given in specific terms in the statute.

The foregoing statute was enacted before the establishment of a full-time headquarters office for the State Medical Association. The medical profession at that time was not in a position to be well advised generally as to the legislation suggested affecting the practice of medicine nor to call the attention of the legislators, as well as the proponents of the legislation, to the various implications of the bills proposed. It would seem that the interest of all practitioners as well as the public would have been better conserved if there had been some provision in the statute in regard to necessary training in surgery and obstetrics and in the administration and use of anesthetics, antiseptics and narcotics.

The fact that those who had practiced osteopathy under license issued before 1923 are permitted under this statute to practice surgery and obstetrics without being required to have any training in those subjects constitutes an exception which seems unreasonable would not render the statute unconstitutional. Whether a statute is or is not a reasonable one is a legislative and not a judicial question. The judiciary can arrest the execution of a statute only when it conflicts with the Constitution. There is nothing in the Constitution requiring the licensing of a physician. The regulation of the practice of medicine rests upon the general police powers of the state. The police power has been defined as "That inherent and plenary power in the state which enables it to prohibit all things hurtful to the comfort, safety and welfare of society."

Under the common law anyone who claimed to possess the skill and learning could engage in the practice of medicine, but it mulcted in damages those who pretended to be physicians and surgeons but had neither learning nor skill. That same common law requirement still constitutes the basis of actions in malpractice and of course would be applicable to osteopaths practicing surgery and obstetrics, and administering anesthetics, antiseptics and narcotics.

DEATH NOTES

CHARLES C. RAY, M.D., of Arcadia, died April 30th, aged sixty years. Doctor Ray graduated from the Medical College of Indiana, Indianapolis, in 1892.

EDWARD A. FLAUGHER, M.D., of Cayuga, died April 6th, aged eighty-three years. Doctor Flaughner graduated from the Medical College of Indiana, Indianapolis, in 1883.

T. R. COOK, M.D., of Bloomfield, died April 14th, aged fifty-one years. Doctor Cook graduated from the Central College of Physicians and Surgeons, Indianapolis, in 1903.

ASA M. STRONG, M.D., of Indianapolis, died May 15th, aged eighty-eight years. Doctor Strong was a veteran of the Civil War. He graduated from the Indiana Medical College, Indianapolis, in 1870.

E. H. PEA, M.D., of Vincennes, died April 14th, aged forty-three years. Doctor Pea had been ill for many months. He was a graduate of the University of Illinois College of Medicine, Chicago, in 1913.

CHARLES S. MACK, M.D., of Laporte, died May 12th, aged seventy-three years. Doctor Mack had not been in active practice for several years. He was a graduate of Columbia University College of Physicians and Surgeons, in 1883.

PHILIP D. NOLAND, M.D., of Kouts, died May 16th, aged seventy years, following an illness of two months. Doctor Noland graduated from the Kentucky School of Medicine, Louisville, in 1888 and from the University of Illinois College of Medicine, Chicago, in 1901.

JAMES S. SHAFFER, M.D., of Terre Haute, died May 14th, aged forty-six years. Doctor Shaffer graduated from the University of Louisville School of Medicine in 1909. He was a member of the Vigo County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

GEORGE M. PELL, M.D., of Carbon, died April 21st, aged seventy-eight years. Doctor Pell graduated from the Medical College of Indiana, Indianapolis, in 1880. He was a member of the Clay County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

NEWS NOTES AND PERSONALS

THE annual session of the American Proctologic Society will be held in Buffalo, June 22, 23 and 24, 1930, with headquarters at the Statler Hotel.

DR. and MRS. FRANK E. WIEDEMANN, of Terre Haute, have returned home after having spent the winter in Australia, New Zealand and the South Sea Islands.

THE annual meeting of the American Association for the Study of Goiter will be held July 10th and 11th at Seattle, Washington; July 12th at Tacoma, Washington, and Mount Rainier.

DR. C. D. LINTON, of Medaryville, who is just completing an internship at St. Elizabeth's Hospital, Lafayette, will locate at Walkerton, Indiana, July 2nd, where he will practice medicine.

THE Indiana State Board of Medical Registration and Examination has announced that examinations for license to practice medicine will begin at 9:00 a. m. Tuesday, June 17th, at the State House, Indianapolis.

DR. and MRS. J. H. FRENCH, of Hartford City, sailed from New York, June 14th, for Vienna, where Doctor French will take a course in ophthalmology and otolaryngology under the direction of Dr. George W. Mackenzie.

THE last regular meeting of the Indianapolis Medical Society until October 7, 1930, was held May 27th at the Athenæum. Dr. Charles E. Ferguson and Dr. G. B. Jackson presented addresses on "Obstetrical Problems and Progress."

ACCORDING to annual custom, the final seminar of the year for the Indiana University School of Medicine was given over to the Alpha Omega Alpha, honorary medical fraternity. This meeting was held May 23rd, in the auditorium of the medical school building.

THE United States Civil Service Commission announces open competitive examination for physiotherapy aide and physiotherapy assistant, applications for which positions must be on file with the Commission at Washington, D. C., not later than June 24, 1930.

THE Tippecanoe County Medical Society held its regular meeting May 8th. A clinic was held at St. Elizabeth's Hospital, at which Dr. A. R. Barnes, of the Mayo Clinic, presided. Dinner was served at Lincoln Lodge, following which Doctor Barnes presented a paper.

THE Northeastern Indiana Academy of Medicine held a meeting May 28th, at the Gawthrop Hotel, Kendallville. Dr. William H. Holmes, of Northwestern University Medical School, Chicago, presented a paper on "Neurological Lesions Frequently Encountered by the Internist."

THE Sixth Councilor District Medical Society met at Richmond, May 15th. Papers were presented by Drs. D. W. Weaver, of Greensburg; George S. Bond, Indianapolis; Roy Lee Smith, Indianapolis; and Charles R. Sowder, Indianapolis. Meetings were held at the Reid Memorial Hospital.

AT the May 6th meeting of the Muncie Academy of Medicine, Dr. Arlie R. Barnes, of the Mayo Clinic, presented a paper on "A General Consideration of the Problem of Coronary Occlusion and Myocardial Infraction." Dr. Ralph Pemberton, of Philadelphia, spoke on "Arthritis" at the May 13th meeting.

THE annual banquet for members of the Madison County Medical Society was held at the Madison County Tuberculosis Sanitarium, May 20th. Dr. J. H. Stygall and Dr. Alfred Henry were principal speakers at the meeting. Mrs. Ella B. Kehrer, who is head of the institution, was hostess to the members of the society.

DR. CHARLES STOLTZ, of South Bend, was honored by a testimonial banquet given him by the St. Joseph County Medical Society, April 23rd. Speakers were Dr. William L. Bryan, president of Indiana University; Doctors Montgomery and Berteling, of South Bend; Dr. Miles Porter, Fort Wayne; Dr. H. H. Martin, Laporte; Dr. J. K. Fleming, Elkhart; and others.

THE Fourth District Medical Society held its twenty-sixth annual session at North Vernon, May 14th. Papers were presented by Drs. D. W. Matthews, North Vernon; W. D. Weaver, Greensburg; O. G. Salb, Seymour; Bine Whitlatch, Milan; G. W. Childs, Madison; Frank W. Cregor, Indianapolis; M. C. McKain, Columbus. Dr. A. C. MacDonald, president of the Indiana State Medical Association, was a guest.

THE ninth annual session of the American Congress of Physical Therapy will be held September 8th to 12th, inclusive, at the New Hotel Jefferson, St. Louis, Missouri. An intensive postgraduate week of physical therapy is to be conducted in conjunction with the session. Complete information and details of the program may be secured from the executive secretary, American Congress of Physical Therapy, Suite 716, 30 North Michigan Avenue, Chicago.

THE Carroll County Medical Society held a meeting April 10th, in Camden, with Dr. Robert Moore, of Indianapolis, as the principal speaker. Dr. F. H. Robinson, of Delphi, discussed the work of the Early Diagnosis Campaign of the county tuberculosis association and urged the assistance of all physicians in making this campaign a success. Each physician was presented with a pamphlet, "Childhood Type of Tuberculosis."

THE United States Civil Service Commission states that physicians are needed at the following named establishments of the United States Indian Service: Cheyenne River Agency, South Dakota; Jicarilla Agency, New Mexico; Theodore Roosevelt Indian School, Arizona; Consolidated Ute Agency, Colorado; Standing Rock School, North Dakota. Persons interested should apply to the United States Civil Service Commission, Washington, D. C., and ask for examination announcement No. 51 and application blanks Forms 2600 and 2398.

THE American College of Physicians announces

the John Phillips Memorial Prize of \$1,500 to be awarded for the most meritorious contribution in internal medicine and sciences contributing thereto, under the following conditions: 1. The contributions must be submitted in the form of a thesis or dissertation based upon published or unpublished original work. 2. It must be mailed to the Executive Secretary of the American College of Physicians on or before August 31, 1930; 3. The thesis must be in English, in triplicate, in typewritten or printed form; the work upon which it is based must have been done in whole or in part in the United States or Canada; 4. The recipient of the prize would be expected to read the essay at the next annual meeting of the College; 5. The College reserves the right to make no award of the prize if a sufficiently meritorious piece of work has not been received; 6. The announcement of the prize winner will be made not later than two months before the annual meeting. Dr. E. R. Loveland, 133 South 36th Street, Philadelphia, is the executive secretary of the American College of Physicians.

IN addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Mead, Johnson & Co.:

Mead's Dextri-Maltose with Vitamin B.

Parke, Davis & Co.:

Ampoules of Pitocin 0.5 cc.

INDIANA UNIVERSITY NEWS NOTES

DR. ALFRED HENRY, of the Indiana University school of medicine faculty, at Indianapolis, spoke to the members of the Phi Chi professional medicine fraternity at their spring banquet held May 22nd at the Graham Hotel, Bloomington.

DR. THURMAN B. RICE, professor of pathology and bacteriology at the Indiana University school of medicine, Indianapolis, has been granted the privilege of attending the International Hygiene Exhibition and World Health Congress in Dresden this summer.

MARSHALL B. TUCKER, of Salem, has been elected president of the Phi Chi national professional medical fraternity at Indiana University for next year. Other officers are as follows: G. A. Peters, Frankfort, vice-president; Frank Coble, Richmond, secretary and treasurer.

THE I. U. board of trustees at their recent meeting awarded the following contracts for improving the I. U. power plant at Bloomington: Westinghouse Company, 750 KW turbine engine, \$48,000; Mattoon Engine Company, for reconditioning engine and additional equipment, \$5,320; Illinois National Supply Company, for a ten-ton traveling crane, \$1,740.

DR. MERLE E. WHITLOCK, of Fairbanks, who was honor man in the Indiana University graduating class of the school of medicine last year and who this year has been doing interne work at the Indianapolis City Hospital, has received a three years' fellowship in surgery at the Mayo Foundation. Only five men in the United States received that recognition this year.

FOUR Indiana University school of medicine students who will be graduated next month have been chosen as internes in the United States public health service. They are Lee Roy Burney, Indianapolis, who goes to the U. S. Marine Hospital, Chicago; Park Huffman, South Whitley, to the same hospital; Otto Hannebaum, Indianapolis, who goes to the hospital at San Francisco, California; and Jefferson Klepfer, Fortville, who goes to Norfolk, Virginia.

At the recent meeting of the Indiana University board of trustees, the members decided to invite representatives of the Indiana Union, the Indiana University Alumni Association, and the Alumni Council to confer with them upon the matter of the location of the new Union Building. The final decision on this point will be reached at the June meeting of the board. At this meeting a full report as to the financial resources available for the Union Building will be received and considered by the board.

LAST year Dean Myers recommended A. H. Maloney, M.D., Indiana University, 1929, to a place in the department of pharmacology in Howard University. He secured the appointment, and was sent to the University of Wisconsin to complete the work for his Ph.D. in pharmacology. Recently, at the annual meeting of the Federation of American Societies for Experimental Biology, his address won very favorable comment. It was the first time in the history of the organization that a Negro has spoken on the program of the federation.

THE convocation speaker at Indiana University, May 21st, was Dr. Morris Fishbein, editor of the *Journal of the American Medical Association* and associate professor of medicine at the University of Chicago and the Rush Medical College. Doctor Fishbein spoke on "Foods, Fads and Follies" and explained that modern advertising apparently can change quickly the food habits of the American people. Of particular interest is the new point of view concerning vitamins, he pointed out, and the fact that the word "vitamin" in a food advertisement constitutes the keyword of appeal.

THE importance and necessity of a normal, well-planned diet is being emphasized in the nutrition classes of the home economics department of Indiana University through experi-

ments with rats. Deficient diets have proved fatal to four rats while their companions, which were transferred to normal diets just at the crisis of their illness, are recovering. The class in "Chemistry of Food and Nutrition," under the direction of Prof. Una Robinson, of the home economics department, placed thirty rats on several different diets, omitting some food element in each diet.

THE following ten students of the Indiana University school of medicine have been initiated into the Nu Sigma Nu professional medical fraternity: John Woolery, Bedford; Ernest Dietle, Lakeville; Harry Teffert, Bloomington; Kenneth Kraning, North Manchester; Neal Carter, Indianapolis; Gordon Haggard, Indianapolis; Russell Lamb, Amboy; William Norman, Hope; Hugh Ramsey, Bloomington; and Edgar Roehm, Indianapolis. The initiation services were held at the Severin Hotel in Indianapolis. Many prominent physicians attended the banquet which preceded the initiation and dance.

NORVELLE C. LAMAR, A.B., Indiana University, 1922; M.D., 1925, is a candidate this June for the Ph.D. degree in neuropsychiatry at the University of Pennsylvania. Doctor LaMar has an appointment next year as psychiatrist to the Institute for Mental Hygiene in Philadelphia, and will become chief of the children's division. Through the Commonwealth Fund, in the fall of 1926, the National Committee for Mental Hygiene of the University of Pennsylvania conjointly privileged Doctor LaMar to become a three years' Fellow in neuropsychiatry in the Graduate School of Medicine at the University of Pennsylvania. Doctor LaMar writes, "It has been of tremendous satisfaction to me that my early and basic medical training was obtained at Indiana University."

THE following members of the 1929 graduating class of the Indiana University medical school who for the past year have been internes at the Indianapolis City Hospital have received appointments to some of the largest medical and scientific institutions in the country: Dr. V. K. Harvey, Indianapolis, will become epidemiologist for the State Board of Health, July 1st, working under Dr. W. F. King. Dr. Don E. Kelley, Darlington, has accepted a residency at the New York Skin and Cancer Hospital. Dr. George D. Beamer, Indianapolis, has received a residency at the Toledo Woman's and Children's Hospital. Dr. Francis Bayless, Anderson, has a residency in pathology at Lakeview Hospital, which is the hospital of Western Reserve University. Dr. Clifford C. Taylor, Thorntown, has a residency at the University Hospital, Ann Arbor, Michigan. He will be engaged in x-ray work. A residency at the Ear, Nose and Throat Postgraduate Hospital at the University of Philadelphia has been

granted Dr. Charles B. Yott, of Indianapolis. Dr. S. R. Snodgrass, Franklin, will become assistant in pathology at the Indiana University school of medicine, and Dr. Robert E. Kinneman, of Martinsville, has won a residency in the Presbyterian Hospital, Chicago.

THE president of Theta Kappa Psi, professional medical fraternity, at Indiana University next year will be James Lamey, Anderson. Other officers elected were: H. G. Colman, Palmyra, vice-president; and Ward Bloom, Marion, secretary and treasurer. Allen Hannah, of Bloomington, is the outgoing president of this organization. The Indianapolis chapter of Theta Kappa Psi held their annual banquet May 15th at the Marott Hotel in Indianapolis. Dean B. D. Myers, of the I. U. medical school at Bloomington, was the principal speaker. Guests who attended from Bloomington included Doctors Myers, W. J. Moenkhaus, J. A. Badertscher, Harry B. Thomas, Ben Ross, P. M. Harmon, and Louis Martin, all of the Bloomington medical faculty; Dr. J. L. Dykhuizen, Lowell Painter, Ralph Sappenfield, Fred Clark, and B. Williams.

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

April 22, 1930.

Meeting called to order at 4:00 p. m.

Present: Wm. N. Wishard, M.D., Chairman; James H. Stygall, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held April 8 read, corrected and approved.

The release, "May Day," read and approved for publication Monday, April 28.

Report of medical meeting:

April 8—Rotary Club, Sheridan, Indiana. "The Conquest of Disease—Diphtheria."

Request for speakers:

April 23—Cass County Medical Society, Logansport, Indiana. Speaker selected.

May 15—Meeting of Sixth District Medical Society, Richmond, Indiana. Speaker obtained to talk on "Heart Sounds." Speaker to be obtained to speak on "Diphtheria."

May 21—Annual meeting of the Indiana Pharmaceutical Association, Lafayette, Indiana. Speaker obtained.

Report of Committee on the Cost of Medical Care by Lee K. Frankel, Ph.D., being the first of several reports contributed by agencies collaborating with this committee, brought to the attention of the Bureau.

Letter received from J. A. MacDonald, M.D., retiring member of the Bureau, stating that it was with regret he was compelled, because of his duties as president of the Indianapolis Medical Society to resign from the Bureau.

Material upon which a release may be based for publication in the press throughout the state upon Saturday, May 10, received from the National Hospital Day Committee.

Following letter received from the secretary of the Minnesota State Medical Association:

"Will you please put us on your mailing list? We would appreciate seeing what you put out in newspaper stories.

"Mr. Rosell of the National Food Bureau, was in our office today telling us again about your work,

and I have heard frequently about it through others. I would appreciate receiving these stories regularly. If we have anything you want, don't be backward about asking for it."

Recently a man calling himself "Dr. Frank W. Osgood, well-known physician and surgeon" from California, made a talk at one of the luncheon clubs in Lake County. A request of the American Medical Association for information upon such a man brought back the following letter:

"Dr. Frank W. Osgood, 'well-known physician and surgeon from California', is neither well-known nor a physician. We have absolutely no record of him—not even in our quack files."

Request received from Mary A. Meyers, chairman of the Child Health Week Committee, asking that the Bureau of Publicity allow this committee to use its radio hour over WFBM on the evening of May 3. Request granted.

Questionnaire received from the chairman of the White House Conference on Child Health and Protection. This questionnaire was to be discussed at a later meeting of the Bureau.

The Bureau went on record favoring the distribution of newspaper releases to the secretaries of all state medical societies.

Correspondence with the Better Business Bureau on the Koch Cancer Cure was laid on the table until the next meeting when the matter was to be taken up in detail.

The secretary of the Bureau was instructed to write to the secretary of the Virginia State Medical Society for full details in regard to the method used in that state to interest the medical profession in child health matters. This letter is to be written as a result of a letter received from the director of the Division of Infant and Child Hygiene of the Indiana State Board of Health saying that a definite program was being worked out in Virginia.

The following bills were approved for payment:

| | |
|---------------------------------|---------|
| The Bailey Office Supply..... | \$15.00 |
| Addressograph Sales Agency..... | 3.38 |

\$18.38

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole April 29, 1930.

April 29, 1930.

Meeting called to order at 4:00 p. m.

Present: Wm. N. Wishard, M.D., Chairman; James H. Stygall, M.D.; Chas. P. Emerson, M.D., and Thos. A. Hendricks, executive secretary.

Minutes of the meeting held April 22 read, corrected, and approved.

The release, "Hospital Day, May 12," was read and approved for publication Saturday, May 10.

Arrangements were made for the following radio talks:

May 3—"Child Health Week."

May 10—"National Hospital Day" by chairman of Indiana committee for observance of this day.

Requests for speakers:

May 12—Boone County Medical Society, Lebanon, Indiana. "Cerebro-Spinal Meningitis." Speaker obtained.

May 14—Fourth District Medical Society, North Vernon, Indiana. President of Indiana State Medical Association to speak.

May 15—Sixth District Medical Society, Richmond, Indiana. "Diphtheria." Speaker obtained. "Heart Sounds." Speaker obtained.

May 21—Annual meeting of the Indiana Pharmaceutical Association, Lafayette, Indiana. Speaker obtained.

Report of medical meetings:

April 8—Rotary Club, Sheridan, Indiana. "The Conquest of Disease."

Copy of the autobiography of Harvey Wiley, M.D., received by the Bureau. One member of the Bureau is to review and write an appreciation of this work.

The Bureau instructed the secretary to prepare and

send letters of condolence to the families of Dr. Earp and Dr. MacCoy whose deaths occurred recently.

Questionnaire from the White House Conference on Child Health and Protection referred to one member of the Bureau who is to report his action at a future meeting.

The following bill was approved for payment:

| | |
|-------------------------|--------|
| A. B. Dick Company..... | \$3.50 |
|-------------------------|--------|

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole May 6, 1930.

May 6, 1930.

Meeting called to order at 4:30 p. m.

Present: Wm. N. Wishard, M.D., Chairman; James H. Stygall, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held April 29 read and approved.

The release, "Keep Your Eye on the Ball," was brought to the attention of the Bureau and after certain corrections are made this is to be submitted to an oculist for final approval before publication Saturday, May 17.

Radio talk May 10, "National Hospital Day," by chairman of Indiana committee for observance of this day.

Questionnaire from the White House Conference on Child Health Protection reported back to the Bureau. Answers to be placed in final form and forwarded by the secretary.

Review of the autobiography of Dr. Harvey Wiley to be presented to the Bureau at a future meeting.

Announcement received of postgraduate lectures in English under the direction of the Faculty of Medicine of the University of Paris. Information concerning these lectures may be obtained by writing to H. Roger, secretary of the Association for the Development of Medical Relations, 12, rue de l'Ecole-de-Medecine, Paris. These courses extend from June 3 to October 30. The secretary was instructed to send these announcements to the editor of THE JOURNAL.

The secretary reported that letters of condolence had been prepared and sent to the families of Dr. MacCoy and Dr. Earp.

The following bill was approved for payment:

| | |
|-------------------------------------|--------|
| Central Press Clipping Service..... | \$5.00 |
|-------------------------------------|--------|

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole May 13, 1930.

INDIANA STATE BOARD OF HEALTH DIVISION OF COMMUNICABLE DISEASES

MONTHLY REPORT—MAY, 1930

Morbidity reports from the health officers of the state do not show any very great change in prevalence over the preceding month.

Measles was the most prevalent; 800 cases reported. The previous month 399 cases reported. The corresponding month last year 2,375 cases were reported. The estimated expectancy was 2,292 cases. The estimate is based on the experience of the last seven years. The disease seems to go in cycles. Perhaps this year is the beginning of a new cycle.

Scarlet Fever. A slight decrease is noted; 594 cases reported; 749 cases reported the previous month; 1,090 cases reported the corresponding month last year. This disease will decline rapidly as warm weather approaches. It is a cold weather disease. It scarcely is known in the tropics.

Smallpox holds her own; 689 cases were reported and 690 cases last month. May last year 322 cases were reported. The normal average for the period is 447 cases. Vaccination is a bugbear, so smallpox will continue.

Typhoid fever is about ready to increase. It is most prevalent in the summer and early autumn, due to poi-

soned food, milk, water, and insects, human carriers and touring over the country. There were eighteen cases reported this month and ten cases last month. Same date the previous year twenty cases were reported.

Diphtheria made a substantial decrease over the previous month. Sixty cases were reported. Eighty-three cases last month. The corresponding date the preceding year fifty cases were recorded. There is a seasonal fluctuation in this disease. The low ebb is in mid-summer and the high is in the late autumn. There is a keen interest shown in the Schick test for susceptibility and toxin-antitoxin for immunization throughout the state.

Cerebro-spinal meningitis is declining. Thirty-four cases this month and fifty-six cases last month. Indianapolis reported fifteen cases and nineteen cases were scattered over thirteen counties.

Undulant Fever. Six cases were reported. Three cases last month. These cases have been reported through the State Bacteriological Laboratory.

Pellagra. One case was reported by Dr. J. G. Elliott, County Health Commissioner of Dearborn county. The case was transferred to Long Hospital, Indianapolis.

The name and number of diseases reported during the month not mentioned above are as follows: Tuberculosis, 279; chickenpox, 292; whooping cough, 173; influenza, 56; pneumonia, 23; mumps, 55; erysipelas, 1.

During the month the director investigated cases of undulant fever in Muncie and Salem.

H. W. McKANE, M.D.,
Director.

ST. JOSEPH COUNTY MEDICAL SOCIETY

May 17, 1930.

The St. Joseph County Medical Society gave a testimonial dinner in honor of Dr. Charles Stoltz Wednesday, April 23, 1930, at the Oliver Hotel, with Dr. J. W. Hill as toastmaster. About 135 laymen and physicians were present.

The principal speaker was Dr. William Lowe Bryan, president of Indiana University, at Bloomington, who spoke of the important place Dr. Stoltz holds in medical circles of the state.

Other speakers who added their bit to the well-earned respect with which Dr. Stoltz is held in local medical and historical circles were Mayor W. R. Hinkle, Dr. Montgomery, Dr. Berteling, Dr. Miles Porter, of Fort Wayne, Professor of Surgery at Indiana University; Ross Lockridge, of Greencastle; Judge Thomas W. Slick, Idem S. Romig, Dr. Marcus Lyon, Jr., Samuel Parker, Rabbi William M. Stern, and Dr. D. A. Bickel. Only three other members of the St. Joseph County Medical Society have been so honored, Drs. H. T. Montgomery, John B. Berteling, and J. W. Hill.

The St. Joseph County Medical Society members were the dinner guests of Dr. St. Clair Darden, at Healthwin Hospital, Wednesday, April 30, 1930. After the usual delicious fried chicken the doctors adjourned to the auditorium, where Dr. Darden spoke on "Tuberculosis of Children", showing many x-rays and outlining what is being done in the new children's building.

The St. Joseph County Medical Society met in the Public Library Tuesday May 6, 1930, with Dr. Geisler, the president, in the chair.

Dr. W. E. Borley, of Mishawaka, was reinstated as a member and Dr. C. C. Reifeis was elected to membership.

Drs. Knode and Hyde presented a case of multiple diverticulum of the bladder with bilateral hydro-ureters and hydro-nephrosis in a male child of eight years of age, probably due to a congenital obstruction of posterior urethra. X-ray films were shown of this most interesting case.

The regular meeting of the St. Joseph County Medical Society was held at the Public Library May 13, 1930,

with the vice-president, Dr. Wygant, of Mishawaka, presiding.

Dr. P. C. Traver gave four most interesting case reports illustrated by lantern slides on:

1. Bilateral polycystic kidney.
2. Hypernephroma of kidney.
3. Renal calculus.
4. Pyonephrosis in case of multiple chronic arthritis.

The arrangement for the annual family party to be held at the South Bend Country Club Wednesday, May 28, 1930, were given by Dr. Blackburn, chairman. Golf for the doctors at 1:00 p. m.; dinner at 7:00 p. m., followed by dancing and bridge.

Respectfully,
MARTHA BREWER LYON,
Asst. Secretary and Treasurer.

INDIANAPOLIS MEDICAL SOCIETY

Meeting of April 1, 1930:

The regular meeting of the Indianapolis Medical Society was held at the Athenaeum, Tuesday, April 1st, at 8:15 p. m. Attendance, ninety. Doctor MacDonald presided.

Elected to membership: Dr. J. H. Smiley.

Elected to honorary membership: Drs. H. O. Pantzer and J. H. Taylor.

New applications: Drs. Paul Cullen and John T. McCollum.

The following Case Report program was given:

1. Multiple Fractures—Posture.....Dr. E. M. Haggard
2. Three Unusual Cases of Acute Intestinal Obstruction.....Dr. J. W. Emhardt
3. Hydrocephalus: Spina Bifida: Low-flap Cæsarean.....Dr. Carl Habich
4. Multiple Surgical Operations in a Case of Peptic Ulcer.....Dr. A. B. Graham
5. Lung Abscess; Cautery Extirpation; Recovery.....Dr. E. Vernon Hahn

Discussion: Drs. G. B. Jackson, T. B. Noble, Sr., and John Carmack.

Meeting of April 8, 1930:

This was a joint meeting of the Indianapolis Medical Society and the Marion County Tuberculosis Association. Dinner was served to one hundred at the Athenæum.

The program was arranged by the Tuberculosis Association as their part in the national campaign for early diagnosis of tuberculosis.

Dr. Stuart Pritchard, of Battle Creek, Michigan, was the guest speaker. His subject was "The Significance of Cough."

Discussion: Doctors Henry, Hatch, McQueen, Sullivan, Stygall, and Dr. Soudah, of Sunnyside Sanatorium. Meeting of April 15, 1930:

This was a joint meeting of the Indianapolis Medical Society with the Staff Society of the Methodist Hospital. It was held in the nurses' auditorium of the hospital. The program was arranged by the Staff Society. Attendance, 250.

The meeting was called to order by Dr. M. Joseph Barry, first vice-president.

Dr. Rollin H. Moser, president of the Staff Society, presided during the scientific program, which was as follows:

1. "Purulent Meningitis Simulating the Epidemic Type".....Doctor Bowers
Discussion: Drs. C. D. Humes and Horace Banks. Doctor Banks showed a number of photomicrographs.
2. "The Role of Obstruction in Acute Appendicitis".....Dr. W. D. Gatch
3. "Cyanosis in Infants" (slide demonstration of chest x-rays).....Dr. Matthew Winters

Meeting of April 22, 1930:

The regular meeting of the Indianapolis Medical Society was held at the Athenæum, Tuesday, April 22nd, at 8:15 p. m. Attendance, one hundred. Dr. M. J. Barry,

first vice-president, presided. The scientific program was as follows:

1. "Ano-rectal Region and Its Relation to Disease".....Dr. H. H. Wheeler
2. "Parkinson's Residues of Encephalitis" (motion pictures).....Dr. C. D. Humes

Discussion: Drs. J. W. Ricketts, Max Bahr and A. E. Sterne.

Meeting of April 29, 1930:

The regular meeting of the Indianapolis Medical Society was held at the Athenæum, Tuesday, April 29th, at 8:15 p. m. Attendance, one hundred. Doctor MacDonald presided. The scientific program was as follows:

Guest speaker: Dr. Ernest Sachs, St. Louis, Missouri. Subject, "The Early Diagnosis of Brain Tumors."

Discussion: Drs. Frank Hutchins, E. Vernon Hahn, C. D. Humes and Max Bahr.

Meeting of May 6, 1930:

The regular meeting of the Indianapolis Medical Society was held at the Athenæum, Tuesday, May 6th, at 8:15 p. m. Dr. Harry J. Weil, second vice-president, presided. Attendance, sixty-five.

Resolutions on the death of Dr. S. E. Earp were read by Dr. H. H. Wheeler.

The program was arranged as the Society's part in the observance of National Child Health Week, and was as follows:

1. "The Significance of National Child Health Day".....Dr. Ada Schweitzer
2. "Factors Influencing the Tuberculin Skin Reaction".....Dr. Byron K. Rust
3. "The Problem of the Mal-nourished School Child".....Dr. Russell Hippensteel

Discussion: Drs. J. S. McBride, James Stygall, Louis Segar and H. B. Mettel.

May 13, 1930: This was a joint meeting of the Indianapolis Medical Society with the Staff Society of St. Vincent's Hospital and was held in the auditorium of the nurses' home at the hospital. Attendance, 200. The Staff Society furnished the program.

Doctor Cunningham, president of the Staff Society, opened the meeting and welcomed the Medical Society. Doctor MacDonald presided during the scientific program and expressed appreciation of the Medical Society on being invited to the hospital.

The scientific program was as follows:

- "Carcinoma of the Lung".....Dr. C. R. Bird
Discussion: Drs. W. F. Molt and Will Shimer.
"Massive Collapse of the Lung".....Dr. M. J. Barry
Discussion: Drs. B. E. Ellis and R. L. Lochry.

Refreshments were served by the hospital after the meeting.

May 20, 1930: This was the regular meeting of the Indianapolis Medical Society and was held at the Athenæum at 8:15 p. m. Attendance, one hundred. Doctor MacDonald presided.

New application: Dr. J. H. Clevenger.

Elected to membership: Dr. Paul Cullen.

The scientific program was as follows:

- "Chronic Prostatitis".....Dr. P. E. McCown
"A New Rectal Analgesia Apparatus" (motion pictures).....Dr. C. O. McCormick

Discussion: Drs. David L. Smith, A. F. Weyerbacher, Roy Lee Smith, Walter Morton, H. R. Allen, Horace Banks and A. J. Michilei.

The program on May 27th is being arranged in honor of Dr. C. E. Ferguson. In order that we again may have the privilege of listening to one of the great teachers of obstetrics, both Dr. G. B. Jackson and Doctor Ferguson will speak on the subject, "Obstetrical Problems and Progress."

The Council is giving a dinner for the officers of the society and Doctor Ferguson, preceding this meeting.

The annual picnic of the Indianapolis Medical Society,

to be held at Polk's Sunlight Dairy Farm at Greenwood, Indiana, is scheduled for June 11th.

Dr. and Mrs. James S. McBride are the proud parents of a son, born at the Methodist Hospital on May 20th.

Dr. and Mrs. H. E. Gabe have returned to Indianapolis after spending the winter in Florida.

Dr. John F. Barnhill, formerly of Indianapolis, will address the Kentucky State Medical Association on Wednesday evening, June 4th, at Louisville, Kentucky. Drs. J. C. Daniels, W. S. Tomlin, K. L. Craft, G. S. Row, F. V. Overman and H. A. VanOsdol will attend.

CHESTER A. STAYTON, M.D.,
Secretary.

ELEVENTH INDIANA COUNCILOR DISTRICT MEDICAL ASSOCIATION

At the forty-third semi-annual meeting of the Eleventh Indiana Councilor District Medical Association, held at Kokomo, May 15th, Dr. C. S. Black, of Warren, was elected president; Dr. E. O. Harrold, Marion, councilor; and Dr. O. G. Brubaker, North Manchester, re-elected secretary-treasurer.

This was one of our best meetings, the speakers being outstanding men in their field, who presented practical papers and discussions.

The program was carried out as planned. Following Doctor Powell's presidential address, papers were presented by Dr. James M. Pierce, of Ann Arbor, and Dr. A. S. Giordano, of South Bend. Due to lack of time Dr. S. M. Cacey's paper was not presented and will be on the program for the Logansport meeting in October of this year.

Miami county had the largest percentage of attendance and again won the Doctor Reed Cup for six months.

The Kokomo doctors outdid themselves in taking care of the meeting and in the most excellent way they entertained.

Ninety-two doctors registered at this meeting.

The Eleventh Indiana Councilor District Medical Association has for its slogan "The Best in the State."

O. G. BRUBAKER, M.D.,
Secretary.

CORRESPONDENCE

HOW SHALL THE DOCTOR BE PAID?

Clarksburg, Indiana,
March 22, 1930.

Editor, THE JOURNAL:

The editorial note concerning "How Shall the Doctor Be Paid?" appearing in the March, 1930 number of THE JOURNAL in my opinion is wise and timely. But it appears to me that there are two factors that haven't been given due prominence. May I, therefore, be permitted to make two suggestions for the consideration of the Committee on the Cost of Medical Care? They are:

1. That your answer given to the question of the *Survey-Graphic*, "How Shall the Doctor Be Paid?" be accorded an important place in the deliberation of the Committee on the Cost of Medical Care. Your answer was, "The doctor should be paid adequately and well and not be expected to bear the burden that consistency and reason indicates should be borne by the community." As it is, while large sums are expended directly or indirectly for the aid of the basketball team, the doctor must go down into his own pocket when it comes to the care of the indigent sick. And I am in favor of the basketball sport, too.

2. The doctors have it in their power to curb one serious evil, namely, the perigrinating deadbeat. This can be done by requiring each physician to report at intervals to his county organization the names of any persons who are deadbeats or who slip out of the state or neighborhood and leave doctors' bills unpaid. It should be seen to that such records are promptly transmitted to neighboring communities and states, thus protecting the doctors there from being victimized.

One case in point will illustrate this phase of the matter: Eight years ago I treated a woman with tuberculosis through a severe attack of pneumonia. Contrary to all expectations she got up and about plus the cough, but capable of housework and childbearing, which were evidently the two prime requisites in her husband's estimation. He was an able bodied man and a bootlegger. He left the state some time afterwards without paying me or anybody else. Recently, the statute of limitations having shut out *all* claims, he has returned to victimize whom he may.

MILLARD F. CUPP, M.D.

REPORTING CONTAGIOUS DISEASES

Clarksburg, Indiana,
March 25, 1930.

Editor, THE JOURNAL:

In an article in the *Indianapolis Star* a few days ago, after setting forth graphically the immensity of the issues involved in the care of the sick, the writer makes the following statement: "These facts, though they look coldly statistical, hide or rather reveal a gripping human story and make clear that the prevention of disease is the biggest problem confronting medical statesmanship." He concludes with these words: "If medical statesmanship does not meet this issue political statesmanship will have to face it."

The fact is that "medical statesmanship" has been face to face with this issue all these years, and it is likewise true that the people have as steadfastly and even doggedly resented and resisted every effort to secure improved conditions. Also, a most lamentable fact is that many individual and aggregate units within the medical profession are continually nagging practitioners because they do not, as by the wave of a hand evidently, inaugurate a system of universal health examinations. If the gentlemen who daily are iterating and reiterating their stock scold for the benefit of the practitioner, will descend from their favored position among the mighty and enter into the effort they may acquire a clearer view of the temper of our citizens. They may likewise discover a few more laws which, if we adopt the slogan of the wet advocates, should be repealed "because they are not enforced." Among these let us list the law requiring the report and quarantine of cases of contagious diseases. It is a well known fact that they are openly scoffed and defied by the laity. If the one should be repealed, so should the other.

MILLARD F. CUPP, M.D.

(EDITOR'S NOTE:—Reporting contagious disease is the duty of the attending physician, and if he fails to do his duty he can be punished for his dereliction of duty. If quarantine regulations are not observed by lay persons, then the health officers should act promptly upon being acquainted with the facts, and a fine or jail sentence will bring about some respect for quarantine regulations.)

BOOK REVIEWS

Books received since May 1, 1930:

INFANT NUTRITION. A Textbook of Infant Feeding for Students and Practitioners of Medicine. By Williams McKim Marriott, B.S., M.D., Professor of Pediatrics, Washington University School of Medicine, etc. 375 pages. Cloth. Price \$5.50. The C. V. Mosby Company, St. Louis, 1930.

MINOR SURGERY. By Arthur E. Hertzler, M.D., Chief Surgeon, Halstead Hospital, and Victor E. Chesky, M.D., Chief Resident Surgeon, Halstead Hospital. Second edition, 602 pages, with 475 illustrations. Cloth, price \$10. The C. V. Mosby Company, St. Louis, 1930.

PHYSIOLOGY AND BIOCHEMISTRY IN MODERN MEDICINE. By J. J. R. Macleod, M.B., LL.D., D.Sc., F.R.S., Regius Professor of Physiology in the University of Aberdeen, Scotland, etc. Assisted by Roy G. Pearce, A. C. Redfield, N. B. Taylor, J. M. D. Olmstead, and by others. Sixth edition, 1,074 pages, with 295 illustrations, including nine plates in colors. Cloth. Price \$11. The C. V. Mosby Company, St. Louis, 1930.

OBSTETRICS FOR NURSES. By Charles B. Reed, M.D., F.A.C.S., Professor of Obstetrics, Northwestern University Medical School; Chief Obstetrician, Wesley Memorial Hospital, Chicago; and Charlotte L. Gregory, R.N., B.S., M.D., Clinical Assistant in Obstetrics at Northwestern University Medical School, Chicago. Third edition, 399 pages, with 144 illustrations; two color plates. The C. V. Mosby Company, St. Louis, 1930.

MANUAL OF PHYSICAL AND CLINICAL DIAGNOSIS. By Dr. Otto Seifert and Dr. Friedrich Mueller; translated from the twenty-fourth German edition by E. Cowles Andrus, M.D., Johns Hopkins University; 543 pages, with 140 illustrations and three colored inserts. Flexible binding. Price \$6.00. J. B. Lippincott Company, Philadelphia and London, 1930.

Reviews:

AMERICAN ILLUSTRATED MEDICAL DICTIONARY. By W. A. Newman Dorland, M.D., Member of the Committee on Nomenclature and Classification of Diseases of the American Medical Association. Fifteenth Edition, revised and enlarged. Octavo of 1427 pages, 525 illustrations, 107 of them in colors. Flexible binding, plain, \$7.00; thumb index \$7.50. W. B. Saunders Company, Philadelphia and London, 1929.

This dictionary is too well and too favorably known to require extensive notice or endorsement. It is a complete dictionary of the terms used in medicine, surgery, dentistry, pharmacy, chemistry, nursing, veterinary medicine, biology, medical geography, etc. In every way it is trustworthy, and its size, flexible binding and thumb index makes the book especially convenient for the physician to use. We haven't the slightest hesitancy in recommending it.

TRAUMA, DISEASE, COMPENSATION. A HANDBOOK OF MEDICO-LEGAL RELATIONS. By A. J. Fraser, M.D., Chief Medical Officer, Workmen's Compensation Board, Winnipeg. 525 pages. Cloth. Price \$6.50. F. A. Davis Company, Publishers, Philadelphia, 1930.

The work of the workmen's compensation boards in connection with industrial accident cases is getting more exacting every year. Compensation for industrial injuries, including not only possible medical and surgical service but compensation covering a portion of the wages lost is the rule rather than the exception in every community. In fact, as the author well says, "people generally are becoming increasingly compensation conscious." A tendency is steadily growing to regard any and every subsequent condition of any disease as due directly or indirectly to some past compensable injury. Where liability exists it should be fairly met, but, on the other hand, an effort should be put forth to prevent imposition and fraud, so often attempted. It is not an easy task to trustworthily diagnose every industrial injury as it pertains to partial or total disability or its future effect upon the physical or mental state of the employee. Therefore anything that assists the physician, surgeon or lawyer engaged in industrial accident compensation work, or in the prosecution or defense of personal injury accidents, will find this book especially useful. The difficulty in determining the effective causes of disease and disability in connection with compensation work, is a real one in many instances. These matters as well as the determination of the award that must be granted, and proportioned with the degree of impaired efficiency, are thoroughly discussed. In twelve chapters the book discusses injury and disease in connection with most of the organs of the body which rise out of and in the course of the employment, giving due consideration to immediate and remote effects. The final chapter discusses the rating of permanent disability, and an abundance of case histories are quoted and numerous authorities referred to throughout the text. The awards and the reasons therefor are interesting phases of the case reports. If we have any criticism to offer it would be concerning the omission of much discussion of the malingering, an all too frequent complication in compensation cases. However, on the whole, the book is invaluable

to the great army of professional men who have to deal with compensation cases.

KING HENRY THE RAKE. By Clement Wood. 325 pages. Cloth. Price \$3.00. The Stratford Company, Publishers, Boston, Mass. 1929.

This is a racy and even "smutty" history of Henry VIII and his licentiousness. Henry VIII, father of Queen Elizabeth, heretic from Rome, founder of the Church of England, is known to have wooed much of the living beauty of Europe, to have wed six times and executed two of his wives, and to have possessed mistresses without number. The author has selected a very fitting title for his book, and while undoubtedly the text recounts facts, it is questionable if many will care to read the intimate story of the relations of King Henry the VIII and his women, though for those who like that sort of reading the book should prove entertaining.

INFIDELS AND HERETICS. An Agnostic's Anthology. By Clarence Darrow and Wallace Rice. 291 pages. Cloth. Price \$3.00. The Stratford Company, Publishers, Boston, Mass.

This book represents a compilation of the writings of others. It is a poor excuse for a man of Clarence Darrow's scholarly attainments. Supposedly the book contains the best gleanings from the most important works of the great agnostics, skeptics, infidels and heretics of the world. In reality much of the stuff printed is mere drivel. Had Clarence Darrow personally written a book on infidels and heretics we have an idea that it would prove interesting reading, even though the reader could not agree with all of the author's conclusions, but it is a mere waste of time to try to wade through a compilation of good, bad and indifferent expressions from infidels and heretics, most of which is inconclusive and pointless.

THE STORY OF RELIGIOUS CONTROVERSY. By Joseph McCabe. Edited by E. Haldeman-Julius. Cloth. 623 pages. Price \$5.00. The Stratford Company, Boston, Publishers. 1929.

This is an exceedingly interesting and scholarly discussion of the history and progress of various religions. The author was in a monastery for twelve years and has taught philosophy in a Catholic college. He has made a lifelong study of the origins and progress of all religions in the world, and the result is his book which is entitled "The Story of Religious Controversy." Among the subjects discussed are the following: The Origin of Religion; the Origin of Morals; the Phallic or Sex Element in Religion; Morals in Ancient Babylon; Morals in Egypt, Greece and Rome; the Degradation of Women Under Religion; the Jesuits; Religions Rogues; the Revolt Against Religion; the Outline of the World's Great Religion; the Myth of Immortality; the Nonexistence of God; the Forgery of the Old Testament; Did Jesus Ever Live?; the Sources of Christian Morality; Christianity and Slavery; the Horrors of the Inquisition; the Triumph of Materialism, etc. The religionist may have some of his opinions and beliefs upset through the presentation of cold-blooded facts, but it would be better for the world if all of us could see things with other than highly astigmatic eyes.

THE IMPOTENCE OF MAN. By Charles Richet, Professor of Physiology, Faculté de Médecin, Paris. Translated by Lloyd Harvey. 150 pages. Cloth. Price \$2.00. The Stratford Company, Publishers, Boston, 1929.

This book, by a French writer, it is said, is being translated into five languages. It is a philosophical discussion of the emotions and physical and mental traits or characteristics of mankind. It is a "cold blanket" on those with exaggerated ideas of any kind, and especially to those egotists who deserve a little chastening. The

chapters are as follows: The Impotence of Man; the Impotence of the Individual; the Impotence of Happiness; Intellectual Impotence; Social Impotence; Physiological Impotence; Moral Impotence; Again Impotence and Happiness. We did not find the book especially interesting, and perhaps because of such a pessimistic statement as the following taken from the last chapter of the book: "Any one who has had the patience to read the various chapters of this short work will be fully convinced, at least so I suppose, of his inevitable impotence in the universe, however an exaggerated idea he may have of his own importance. * * * You must not conceive exaggerated hopes but recognize the limited sphere of your power and be content with a modest existence." It may do to philosophize and urge living the quiet life, with few aspirations and a studied effort to be content with your surroundings whatever they may be, but most of us are not satisfied unless we have aspirations and are encouraged to put forth an effort to satisfy those aspirations. The world never would progress if every one sat down and decided to be content with things as they are.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

DIPHTHERIA TOXIN-ANTITOXIN MIXTURE 0.1 L. + SENSITIZING (SHEEP).—A diphtheria toxin-antitoxin mixture (New and Nonofficial Remedies, 1929, p. 360), each cc. of which constitutes a single dose of diphtheria toxin neutralized with the proper amount of antitoxin produced from sheep. It is marketed in packages of three vials, each containing one cc.; in packages of one vial containing ten cc.; in packages of one vial containing thirty cc.; and in packages of thirty vials, each containing one cc. United States Standard Products Co., Woodworth, Wisconsin.

TABLETS TUTOCAIN No. 6.—Each tablet contains tutocain (New and Nonofficial Remedies, 1929, p. 51) 0.05 Gm. Winthrop Chemical Co., Inc., New York.

AMPOULES OF PITOCIN 0.5 CC.—Each ampule contains more than 0.5 cc. of pitocin solution (*Jour. A. M. A.*, July 13, 1929, p. 117). Parke, Davis & Co., Detroit.

MERTHIOLATE JELLY 1:2,000.—It contains merthiolate (*Jour. A. M. A.*, December 7, 1929, p. 1809) 0.05 percent, eucalyptol 0.016 percent, eugenol 0.016 percent in a water-soluble base. Eli Lilly & Co., Indianapolis.

MERTHIOLATE OINTMENT, 1:1,000.—It contains merthiolate (*Jour. A. M. A.*, December 7, 1929, p. 1809) 0.1 percent in a petrolatum base. Eli Lilly & Co., Indianapolis.—(*Jour. A. M. A.*, April 19, 1930, p. 1237).

FOODS

The following products have been accepted as conforming to the rules of the Committee on Foods of the Council on Pharmacy and Chemistry of the American Medical Association:

KLIM POWDERED WHOLE MILK (MERRELL-SOULE Co.).—It is whole milk from which all but about two percent or less of the normal water has been removed by means of the spraying process of drying milk. It contains: fat, 28.0 percent; protein, 26.7 percent; lactose, 38.0 percent; ash, 5.8 percent; water, 1.5 percent. Klim milk is used for supplementary feeding to be used according to a physician's formula.

BORDEN'S NATURAL FLAVOR MALTED MILK (The Borden Co., New York).—It is a processed mixture of barley malt, wheat flour and whole milk, reduced to powdered form. The product contains: fat, 9.2 percent; protein, 15.5 percent; lactose, 13.5 percent; maltose, 35.6 percent; dextrin, 20.2 percent; ash, 3.8 percent; moisture, 2.2 percent. It is easily digested.

MELLIN'S FOOD (Mellin's Food Co., Boston).—it is a milk modifier. It contains: fat, 0.16; protein, 10.35; maltose, 58.88; dextrins, 20.69; soluble carbohydrates, 79.57; salts, 4.30; water, 5.62. Mellin's Food is a soluble, easily digestible dry extract made from wheat flour.

wheat bran, malted barley and potassium bicarbonate.

MELLIN'S FOOD BISCUITS (Mellin's Food Co., Boston).—They contain a large percentage of Mellin's Food.—(*Jour. A. M. A.*, April 12, 1930, p. 1145).

PROPAGANDA FOR REFORM

CITRIN NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that Citrin is marketed by the Table Rock Laboratories in the form of capsules claimed to contain "50 mgm. cucurbitcitrin," the latter being "a nontoxic glucosid-saponin processed from the seed of the watermelon (*Cucurbita Citrullus*)". In the information submitted to the Council, Citrin is stated to be "the crude extract" obtained from the watermelon seed. The available evidence does not indicate that the product is a pure glucoside. Citrin is stated to be "for the treatment of hypotensive cardio-vascular disease" and is advertised as "The new therapy for vascular hypertension." The Council reviews the available evidence for the usefulness of Citrin and explains that the question at issue seems to be whether the observed lowering of blood pressure by drugs is of any great clinical value, and, when this does occur, to what extent it is due to the drug and to what extent to other factors. Altogether, the Council concludes that the clinical evidence does not establish the therapeutic usefulness of Citrin; hence, the Council declared Citrin unacceptable for New and Non-official Remedies.—(*Jour. A. M. A.*, April 5, 1930, p. 1067).

HALEY'S M-O MAGNESIA-OIL NOT ACCEPTABLE FOR N. N. R. AND MAGNESIA-MINERAL OIL (25) HALEY OMITTED FROM N. N. R.—The Council on Pharmacy and Chemistry reports that Haley's M-O Magnesia-Oil (exploited with the emphasis on "Haley's M-O") is the name under which the Haley M-O Co., Inc., has marketed a mixture of magnesia magma (milk of magnesia) and liquid petrolatum; that the firm requested acceptance of the product for New and Nonofficial Remedies, stating that it is composed of magma magnesiæ 75 percent by volume and liquid petrolatum 25 percent by volume; that the Council refused admission of the product to New and Nonofficial Remedies because the use of a mixture of liquid petrolatum and magnesia magma in fixed proportions under an uninforming name is detrimental to rational prescribing; and that the preparation was accepted after the firm had adopted the name Magnesia-Mineral Oil (25) Haley and had revised its advertising to make it acceptable. After the Council had been obliged repeatedly to object to the advertising, the firm wrote to the Council that its attempt to meet the requirements of the Council were proving financially unprofitable and that it had decided to go back to the old name "Haley's M-O." This means that physicians again will be asked to use this simple pharmaceutical mixture under an uninforming name. The Council directed the omission of Magnesia-Mineral Oil (25) Haley from New and Non-official Remedies and declared Haley's M-O Magnesia-Oil ("Haley's M-O") unacceptable for New and Non-official Remedies.—(*Jour. A. M. A.*, April 5, 1930, p. 1067).

SUN CHOLERA MIXTURE.—During the cholera excitement in New York in June, 1849, a physician by the name of G. W. Busted sent a recipe for the disease to the editor of the New York *Sun*. It was printed, and was so successful in the relief, at least, of the symptoms that it came to be known popularly as the Sun Cholera Mixture. It was admitted to the first edition of the National Formulary in 1883 and in subsequent editions under that name. The original formula called for: tincture of opium, tincture of rhubarb, tincture of capsicum, spirit of camphor, essence of peppermint, equal parts. The formula was modified somewhat later on account of the changing strength of some of the ingredients in later editions of the Pharmacopeia.—(*Jour. A. M. A.*, April 5, 1930, p. 1088).

COROZONE.—The Corozone unit is a small portable ozonator which can be operated on the ordinary electric light circuit. Ozone in sufficient concentration to kill

bacteria is not suitable for ordinary respiration because of its irritant action. Ozone cannot be used as a substitute for good ventilation in a room any more than deodorants or perfumes can be used as a substitute for bathing the body. There has been no sound scientific work brought forward to show that there is any place whatever for ozone in problems of ventilation.—(*Jour. A. M. A.*, April 5, 1930, p. 1089).

SYRUP OF ALFEMINE, ET AL.—Sherman L. Davis, Ph.D., is professor of chemistry and director of nutritional research in the Indiana University School of Dentistry. He is neither a physician nor a dentist. During the past few years Professor Davis has been doing a good deal of lecturing before dental societies. In his talks Professor Davis recommends certain proprietary medicinal products, four in number: "Syrup of Alfemine," "Vicodol," "Caperoid Tablets" and "Vicaperol Capsules." All of these products used to be manufactured by the Ucoline Products Co. of Indianapolis. The manufacture and distribution of these products has been taken over by the Rochester Laboratories, Inc., Rochester, Minnesota. It appears that the Rochester Laboratories distribute the preparations on a royalty basis, the royalties being turned over to the trustees of Indiana University. Professor Davis does not receive any part of the royalty. Undoubtedly, the newly formed Council on Dental Therapeutics created by the American Dental Association will, in due time, investigate and report on the formulas of Professor Davis that are sold under proprietary names. Meanwhile, the entire arrangement constitutes an unusual scheme in its relationship to the practice of either scientific medicine or dentistry.—(*Jour. A. M. A.*, April 12, 1930, p. 1163).

ACTION OF PHENOLPHTHALEIN.—One should always think of the possibility of a phenolphthalein eruption when studying the etiology of a puzzling exanthem. As phenolphthalein is excreted chiefly into the intestine by means of the bile, and reabsorbed from the colon, there is a tendency for its action to continue for several days. Hence, its continued daily use may lead to ultimate overaction with diarrhea, abdominal pains, tenesmus and bleeding.—(*Jour. A. M. A.*, April 12, 1930, p. 1165).

VAN ARD SANATORIUM.—The Van Ard Sanatorium, Inc., does a quack rheumatism-cure business from an old brick residence on the south side of Chicago. It is an Illinois corporation with an authorized capital of \$10,000. Its officers are listed as J. B. Creevy, president; H. L. Cassel, secretary. They are the same individuals who are, or were, connected with the "Cass Treatment for Rheumatism." The impression is given in the Van Ard advertising that Charles J. Cahill, who is connected with the business of the firm, has special knowledge of the treatment of rheumatism. Needless to say, Cahill's name is unknown to scientific medicine. Just as in the Cass Laboratories' fake the letters were signed "Harvey L. Cass" (a person who didn't exist), so in the Van Ard Sanatorium quackery most of the letters are signed "J. B. Crenon, Secretary." And just as "Harvey L. Cass" was really Harvey L. Cassel, so, doubtless, "J. B. Crenon" is Joseph B. Creevy! Reports were received from California of three deaths in which the principal autopsy finding was an extreme degree of atrophy of the liver. The reports brought out that two of the women had been taking the Van Ard "treatment," while the third had been taking the Cass "treatment." From the results of chemical analyses carried out in the A. M. A. Chemical Laboratory it may be stated that the Van Ard treatment consists essentially of acetylsalicylic acid (aspirin), cinchophen, sodium bicarbonate (baking soda) and a laxative. It is obvious that the Van Ard and Cass "treatments" are for all practical purposes identical. In the Cass treatment it was epsom salt, flavored, while in the Van Ard treatment it seems to be phenolphthalein and aloes.—(*Jour. A. M. A.*, April 19, 1930, p. 1255).

"S. C. A." SOLUBLE ANTIGEN, "S. C. A." SERUM EQUINE (CONCENTRATED), AND "S. C. A." SERUM BOVINE (UNCONCENTRATED).—The Council on Pharmacy and Chemistry issues a preliminary report reviewing the available evidence published by J. C. Small concerning

preparations stated to represent products obtained from the bacterium claimed to be the cause of rheumatic fever. Preparations of this organism were presented to the Council by the H. K. Mulford Co. as S. C. A. Soluble Antigen, S. C. A. Serum Equine (Concentrated) and S. C. A. Serum Bovine (Unconcentrated). The Council decided that the published work of Small does not offer sufficient evidence to warrant the acceptance of the Mulford products. Further doubt has been cast on the value of this therapy by the paper of Dr. May G. Wilson, in which it is reported that the administration of *Streptococcus cardioarthritidis* antiserum and of the soluble antigen of *Streptococcus cardioarthritidis* did not seem to influence the usual clinical course of the disease or prevent the occurrence of relapses. The Council holds that, while the products are suitable for controlled clinical investigation by experimental workers, propaganda which invites their general use is not warranted at this time.—(*Jour. A. M. A.*, April 26, 1930, p. 1303).

UNDULANT FEVER BACTERIAL VACCINE.—The Council on Pharmacy and Chemistry reports that the Jensen-Salsbery Laboratories, Inc., have presented Undulant Fever Bacterial Vaccine (Jensen-Salsbery) for consideration by the Council. This product is stated to be a physiologic saline suspension of *Brucella melitensis* (var. *abortus* seventy-five percent, and *suis* twenty-five percent). From an examination of the published reports the Council's referee came to the conclusion that this material does not offer adequate evidence for the usefulness of the product and that this form of treatment should be subjected to further controlled clinical trial. The Council voted to publish its preliminary report and to postpone definite action on the question of accepting Undulant Fever Bacterial Vaccine (Jensen-Salsbery) while awaiting the development of further evidence of its therapeutic value.—(*Jour. A. M. A.*, April 26, 1930, p. 1304).

INCORRECT LABELING OF UPSHER SMITH DIGITALIS PREPARATIONS.—Tablets Folia-Digitalis (Upsher Smith) one grain, Tincture Digitalis (Upsher Smith) and Capsules Folia-Digitalis (Upsher Smith) one grain, were exempted by the Council on Pharmacy and Chemistry as having the status of official substances. The Council reports that a committee for the study of the actions of digitalis in patients suffering with pneumonia used tablets of digitalis Upsher Smith and tablets of digitalis of another firm and directed that patients receive these in uniform doses calculated to induce a moderate degree of digitalization, assuming that both specimens of tablets were labeled correctly; that after a total of 258 patients had been treated it was discovered that the tablets of digitalis Upsher Smith induced both severe and minor toxic symptoms far more frequently than those of the other firm, and that an examination of the records brought out that minor toxic symptoms were more than ten times as great in those who received the Upsher Smith tablets as in those who received the other firm's tablets and that the mortality was forty-nine percent of all cases of pneumonia treated with the first, as compared with thirty-eight percent in all those treated with the other tablets. The Council further reports that both brands of tablets were then assayed; that the tablets of the other firm were found to be of activity stated on the label, and those of Upsher Smith to be twice the activity stated. Upsher Smith has assured the Council that any of his misbranded preparations on the market will be called in, and that in the future the greatest care will be taken to insure that the potency of these will be stated correctly.—(*Jour. A. M. A.*, April 26, 1930, p. 1305).

THERAPEUTIC CLAIMS FOR THEOBROMINE AND THEOPHYLLINE PREPARATIONS.—The Council on Pharmacy and Chemistry reports that, questions having arisen in regard to the advertising claims that might be permitted for the xanthine derivative preparations accepted for New and Nonofficial Remedies, the Council's referee for these products presented a review of the important literature, with special reference to the value of xanthine derivatives in vascular hypertension and arteriosclerotic conditions.

In the light of this review, the Council decided that the following claims could be permitted for both theobromine and theophylline: (a) diuretic action; (b) myocardial stimulation; (c) occasionally (and more often with theophylline) relief of pain in angina and similar lancinating pains. It does not seem permissible to claim lowering of hypertension.—(*Jour. A. M. A.*, April 26, 1930, p. 1306).

THE CUTANEOUS ABSORPTION OF MERCURY.—It requires little imagination to appreciate the uncertainties that must attend the problem of dosage when such a relatively insoluble substance as mercury is applied to the skin. The size of the particles, the nature of the adjuvant, the place of application and its conditions, and the vigor with which inunction is practiced are some of the complicating features. The assumption that only the mercury globules rubbed into the follicles are absorbed gradually had led to the clean inunction method proposed by Cole and his collaborators. Some indication of the efficacy of inunction procedures can be secured by estimation of the substance that is eliminated. This has been done and it was found that the amount of mercury which is absorbed and excreted after inunction is dependent directly on the concentration of the metal in the base—that is, five, twenty-five and fifty percent preparations show that the excretion is about in proportion to the concentration in the ointment used. Again, contrary to what many have assumed, colloidal mercury ointments showed no greater excretion of mercury than official old-fashioned mercury ointments of equal concentration in benzoinated lard. Furthermore, massive or intensive weekly inunctions of a thirty-percent mercurial ointment may lead to an equal or higher mercury excretion than the simple daily use of fifty-percent ointment or even certain types of intramuscular injection.—(*Jour. A. M. A.*, April 26, 1930, p. 1322).

JOHN R. BRINKLEY, QUACK.—John R. Brinkley of Milford, Kansas, has for years been quacking it but, having his own so-called hospital, it has been possible for him to keep his own records, so that only by accident do the results of his work become public. The newspaper publicity that has been given recently to Brinkley is beginning to bring to light some of the crudities of his work. Brinkley's "specialty" is the alleged sexual rejuvenation of the male by the (also alleged) implantation of goats' testicles into the human scrotum. Naturally, the deluded individuals who go in for this particular line of medical humbug are not going to complain after they have found that they have been swindled. If Brinkley had been shrewder, he would have confined his quackery to this particular field. More recently, however, he has been going into the treatment (still, alleged) of prostate trouble and, naturally, men do not have the same hesitancy about discussing operations for the relief of pathologic conditions of the prostate that they do in talking about sexual rejuvenation. The Kansas City *Star*, which has been giving its readers a great deal of information about Brinkley's methods, has now published some interesting material from Brinkley victims who throw light on the way in which he uses his radio station to get in touch with persons and how he treats them at his hospital.—(*Jour. A. M. A.*, April 26, 1930, p. 1339).

THE BAKER BALLYHOO.—Norman Baker, the high-pressure gentleman at Muscatine, Iowa, who has invaded recently the medical field with two quack cancer cures—those of Ozias and Hoxsey—continues to get publicity. This in addition to the very good job that he does over his own radio station, KTNT. Recently newspaper accounts have appeared stating that Baker had claimed that an attempt had been made on his life and that an attempt had been made to blow up his radio station. These reports were not confirmed. The only other newspaper items that have been noted regarding Baker are the reports of cancer victims who have died following the Baker Institute "treatments."—(*Jour. A. M. A.*, April 26, 1930, p. 1340).

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GALL BLADDER DISEASE*

A CONSIDERATION FROM A DIAGNOSTIC VIEWPOINT

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Cholecystography. In the five years that have elapsed since the preliminary report of Graham and Cole, cholecystography has come to be a well-recognized and universally used method of gall bladder study. A number of dyes have been used in the search for one of low toxicity, one largely eliminated by the bile and yet capable of producing an opaque shadow. The technique, dosage and correlation of x-ray shadows with clinical, surgical and autopsy findings have, in this brief period, been studied, determined and analyzed until today it is accorded a creditable position in diagnosis of diseases of the gall bladder. At first thought to be a test of function only, it has become of importance in the study of pathology.

In correlating the symptoms with x-ray findings of disturbed function, one must ask how much disturbance can there be and yet produce no symptoms, or, to put it another way, can there be enough disturbance of function to cause symptoms and yet no corresponding degree of pathology.

I agree with Graham that the function of a gall bladder may be impaired sufficiently to cause symptoms and yet show insufficient pathological changes to be discernible to the surgeon's eye or finger. If this be true, then my position, that routine cholecystectomy is unsound, is tenable. Further, it must be emphasized that failure to visualize a gall bladder may be due to cirrhosis, hepatitis or edema of the liver, or to obstruction of the hepatic or cystic ducts and the gall bladder not necessarily implicated. One finds no added argument for wholesale removal by Graham's reference to a series of fifty-two cases where removal of the gall bladder was done, the organs showing little or no gross pathology, with complete relief of symptoms for one year or more. It would seem probable that a higher percentage of relief from symptoms would obtain after removal of gall bladders but little diseased, or where the disease was of short duration than would obtain in an-

other group with disease of long standing because the longer the gall bladder disease obtained, or the more severe the affection, the greater the likelihood of concomitant hepatic disease. Mere removal of a gall bladder in the presence of marked liver disease must fail to relieve even symptoms and it is my opinion that serious gall bladder disease independent of concomitant liver disease is far from being the rule. Neither can one refrain from emphasizing the fact that a fairly typical clinical picture of gall bladder disease may be created by a peptic ulcer, pancreatic disease, appendicitis, mucous colitis or vagatonia. In such cases normal cholecystographic findings become materially helpful in diverting attention from an innocent gall bladder to the real pathology. It must, likewise, be borne in mind that these conditions may coexist with gall bladder disease, in which case cholecystectomy must necessarily be inadequate.

We have not yet arrived at the point in gall bladder visualization study where as definite statements may be made concerning the relationship between normal gall bladder findings and symptoms as we can concerning that between positive findings and symptoms resembling gall bladder disease. Kirklin's conclusion, that the accuracy of normal x-ray findings is about sixty-nine percent as contrasted with that of ninety-three percent in abnormal findings, is not wholly trustworthy since his studies were based on the oral method of administration of the dye. An analysis of Graham's studies, based on similar criteria, shows a correct diagnosis in eighty-eight percent, while Case obtained a percentage of ninety in proved diagnosis at operation. Both of these observers use the dye intravenously.

While it is recognized that cholecystography has its limitations, not a little of the literature telling what cholecystography does not do is based on unfamiliarity with what it is intended to do. It was not proposed by its originators as a test for the determination of the pathological conditions obtaining in a gall bladder or the bile ducts, but as a study rather of the function of both the liver and gall bladder. Certainly it should not be expected to disclose the duration of a condition which interferes with a satisfactory visualization.

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It may, however, satisfactorily register the existence of interference with function and its disappearance as illustrated in Case IV, reported by Boardman, when no visualization was obtained in a study in February, 1925, but normal visualization was obtained in February, 1926, with treatment in the interim. Such a case does not emphasize uncertainty of cholecystography, as might be inferred, since it appears in a paper calling attention to *uncertainties*, but rather serves as a yardstick in the determination of improvement. Repeated studies of the same case seems to warrant the statement that the degree of density of the gall bladder shadow is constant, the characteristic shape is maintained after a functional meal and the reduction of size is uniform. This statement is true of the intravenous method, but obviously less so with the oral method.

Extensive liver disease, obstruction of either the hepatic or cystic duct, or a gall bladder filled with stones or new growths all so obviously interfere with the entrance of dye-laden bile that elaboration is unnecessary. But there are, at least, three other factors which are worth while considering: (a) Concentration of bile in the gall bladder is essential for visualization with the dye. The mechanism of this function is not settled, but it probably resides in the wall. Whether an intact mucosa is essential is yet moot, since normal concentration has been observed in gall bladders which when removed showed extensive damage to the mucosa. In this connection it is well to remember that gall bladder specimens must be examined by the pathologist *immediately* after removal, since rapid post-mortem changes occur in the mucous membrane. Graham recently called attention to this and insists upon immediate examination. Chandler and Newell found poor concentration in gall bladders having what appeared to be normal mucosa. Some recent work especially by Winkenverder lends credence to the belief that some of the concentration is accomplished by the lymphatics in the subepithelial stroma. Until this physiological function is settled, visualization or lack of visualization must be subject to a degree of uncertainty. (b) Normal sphincter mechanism at the lower end of the common duct as a factor in the success of cholecystography has not been emphasized sufficiently and has been disregarded by too many workers with this method of study of gall bladder function. During digestive periods the sphincter of Oddi relaxes and permits a free flow of both gall bladder and fresh liver bile into the duodenum; during the interdigestive periods this muscle, normally, closes the outlet and permits the liver bile to back up into the gall bladder for storage. If then, during a dye study of the gall bladder, the sphincter relaxes and the dye-laden bile flows uninterruptedly into the duodenum, visualization will not be satisfactory, even though the gall bladder be normal. It is obvious that the normal reflexes from the stomach

and duodenum which induce sphincter relaxation may obtain during dye study and thus add another factor of uncertainty in the evaluation of the results of the test. (c) Finally, one wonders if the gall bladder be full of concentrated bile at the time a dye study is done, will it be possible for new dye-laden bile from the liver to enter an already full gall bladder? I have thought of this contingency often in my cholecystography work and have wondered if this uncertainty might be eliminated by giving a fat meal at the beginning of the test for the purpose of having an empty gall bladder to receive the dye-laden bile on arrival.

Cholecystography is more than a mere functional capacity test of the gall bladder; it affords a nearer approach to actual knowledge of the anatomic condition than can be obtained by any other means of study except visualization through abdominal section. It is comparable to an opaque meal study of the stomach which certainly tells more than mere functional disturbance. By cholecystography one may estimate the filling and emptying ability of the gall bladder, determine distortions in contour, establish the presence of filling defects and learn the emptying capacity as well as something of the concentration function. These facts are now demonstrable and it remains to adopt a common technique and nomenclature in order that a common language may be used and comparison of results made possible. With such an end in view, Case has proposed a terminology which seems adequate. Particularly am I in accord with his suggestion that the terms "negative" and "positive" as now in current use for gall stone shadows be discontinued and in their stead use the terms "opaque" and "nonopaque". He suggests the following terminology: "Normal," when the gall bladder outline is seen at the normal time, shows normal size, contour, density and contraction after a fat meal. "Absence of shadow" when no outline is visualized. "Stone positive" if x-ray evidence of cholelithiasis be seen. "Pathologic, non-calculus" which includes all cases not properly classified in the other three groups.

It is equally important that a uniform technique be adopted. Such a technique should endeavor to economize the time of the patient, to interfere as little as possible with his daily routine of work, meals or treatment, to agree on the number of hours elapsing between the giving of the dye and taking the first pictures, and, finally, adopt a routine method of administration. Agreement on the latter step of the technique will prove the most difficult to make uniform.

Both the oral and intravenous methods of administering the dye will continue to be used and the most that can be hoped for in the way of standardization would be to agree on a technique for both. For the intravenous route a widely used method consists in giving the injection at 5:00

p. m., allow a carbohydrate supper, the first films taken at 8:00 a. m. the next day, a breakfast of egg yolk and a glass of milk and cream, equal parts immediately after the fifteen-hour film, a second series of films at 11:00 a. m. and a later series if tardy disappearance of the shadow is observed. Our own method consists of giving the dye at 8:00 a. m., withholding the breakfast; the first films are made at four- and six-hour periods. A fat meal of a glass of milk and cream, equal parts, is given immediately after the six-hour film and a second set made one hour later, and as many subsequent films as the study warrants. This method has the disadvantages of omission of breakfast and consumes the forenoon for the patient as he either feels indifferent to, or is advised not to return to, his usual activities during the forenoon. The other method raises the question, does a gall bladder, once emptied after the function meal, refill to the point of visibility? Cases studied on normals would indicate that it does not refill. If this be true, then the lapse of three or four hours after the fat meal before the function films are made is open to error. I know it is not true of the oral method, since the absorption from the intestine is slow and more prolonged, dye-laden bile continues to find its way into the vesicle.

There are but two objections to the intravenous method: (a) The possibility of local irritation, and (b) the occurrence of systemic reactions.

The first can be obviated by proper technique, while the latter usually can be avoided by the use of freshly distilled water to make the solutions, clean apparatus and the use of the newer dye, tetraiodophenolphthalein. Case has a series of 3,000 injections with reactions occurring in only ten percent and all of these of a minor nature. Graham has collected a series of 15,000 cases studied by the intravenous method with three deaths listed. One of these reported by Huddy was given about two times the maximum amount of dye advised by Graham and his co-workers. Another occurred in Graham's own series during a study of the effect of time on solutions and this patient had a myocardial disease. A third is reported by Byreis in a patient who died seven days after an intravenous injection given twenty-four hours after an oral administration. This case was found at autopsy to have thirty mgms. of mercury in his abdominal organs. Graham concludes his analysis of these cases with the opinion that such a mortality is lower than abdominal sections as a diagnostic measure.

Our method of oral administration consists of a supper free of fats, four gms. of tetraiodophenolphthalein is given at 8:00 p. m., and the next morning without breakfast the first films are made at 9:00 a. m.; a fat meal is given immediately and function films are made one hour later and as often thereafter as the study warrants. The oral method of administration of the dye is the

one now most widely used from the standpoint of the actual number of roentgenologists and clinicians studying gall bladders by means of a dye. There is probably less difference in the number of patients studied by the two methods. At the Mayo Clinic, the American gristmill for statistics, 5,705 cases were studied by the oral method in 1927. Cholecystography would appear to be a routine in that clinic since only 869 (fifteen percent) came to operation. Of these, 422 proved at operation to be gallstone cases with ninety-seven percent accuracy in the x-ray diagnosis. Case reports a series of 138 consecutive cases with stones found at operation with a cholecystographic diagnosis exceeding ninety-five percent. He also states that on the other hand he had less than nine percent error in the x-ray conclusion that no stones were present. Viewed from another angle he concludes that the test is worth eighty-three percent in excluding gross disease of the vesicle.

The determination of the degree of reduction of the gall bladder shadow is even more difficult of standardization. Linear measurements can be made of the filled and emptied bladder and a percentage result estimated; a scheme of ovals may be used, each numbered, one to any desired terminal, representing complete disappearance, but any method selected becomes largely an individual estimate. This is of no great importance in one's own work from day to day, but when an attempt is made to present that work for the consideration of others, then the need for some better way of determining the degree of contraction becomes apparent. Einthoven erected an equilateral triangle within a circle and made a common language for the enlargements and positions of the heart. Some doctors to whom gall bladders have been a friend may well dedicate themselves to this task.

Much has been claimed for cholecystography in the study of diseases of the biliary tract which has inspired even Graham, the originator of the method, to urge caution in the interpretation of filling and emptying variations. The one definite claim that has been made by Graham, namely, that the absence of a gall bladder shadow after dye given intravenously was the one certain evidence of disease, has likewise been questioned, particularly by Hines, who conducted a series of studies on three patients having achylia. These cases were stated to have no biliary tract disease and that the gall bladder was not visualized, or showed only a faint visualization in intravenous dye study. He further analyzed the records of some ninety cases in which gastric analyses and cholecystography had been done. Eight of this latter group were reported to have achlorhydria with abnormal cholecystographic findings.

Following closely on the heels of the publication of Hines' conclusions, Davis and Tally reported their study of twenty patients having no free hydrochloric acid in fractional test meal stud-

ies and who were subjected to cholecystographic study. Of these, fifteen were subjected to the histamine test and in thirteen free hydrochloric acid was found still absent. These thirteen were not identified in their "table of results", though they were the only ones which properly should have been listed, since only those so tested can unquestionably be classed as achylia. Their study is further subject to the criticism that it refers to *free* hydrochloric acid only, no report being made on *combined* hydrochloric acid findings. However, of the total twenty cases tabulated, ten showed normal cholecystograms according to their standards of normals. The value of their report is lessened further by the omission of the functional study in a part of the series. At least it may be stated that this phase of the question is not yet settled.

Simultaneous Study of Liver Function and Gall Bladder with Dye. Cole and his associates believe that the rather large dosage of dye necessary for cholecystography offered a better opportunity for study of liver function than that secured by the relatively small dosage of dyes used in the ordinary liver function tests. In a series of fifty normals they found a retention of twelve percent in the blood serum at the end of thirty minutes and five percent at the end of sixty minutes. Adopting these figures as normal retention they studied a variety of diseased conditions of the liver ranging from cholecystitis without jaundice to primary and metastatic carcinoma and concluded that the method gave valuable information concerning the excretory function of the liver, helped differentiation between obstructive jaundice due to malignant disease and that due to inflammation and stones and was of value in determining operative risk. The dye was given in the morning, blood was drawn at thirty and sixty minutes and routine cholecystograms made at four, eight and twenty-four hours.

Appreciating the advantage of making two studies with one dye injection, I undertook the study of a series of cases by this method. Their published technique was followed, but satisfactory colorimetric readings could not be obtained. Subsequent modifications offered in personal communication proved no more satisfactory and the method has been discontinued for the time. The principle appeals to me and I am still hopeful.

Blood Bilirubin Estimations. The origin of bilirubin remains among the many unsolved physiological problems, but whether it be formed by the Kupffer cells in the liver, or in some other portion of the body to be brought to the liver for elimination merely, it is notwithstanding intimately connected with liver activity. The normal levels of bilirubin in the blood lie between two and four mg. per 1,000 cc. of blood based on the original van den Bergh method. The levels are higher than these figures if Thannhauser and Anderson's modification of the original method, or that of

Green, Snell and Walter be employed. By these modifications a more complete coupling of azo bilirubin is obtained which give normal levels between five and fourteen mg. The findings by the van den Bergh method are uninfluenced by luteins, lipochromes, pigments of fats, or green vegetables, or by hemolysis, all of which give a yellowish discoloration to blood serum. All the methods of estimating blood bilirubin serve to uncover subclinical icterus and thus enable the clinician to study conditions earlier than were he obliged to wait for the appearance of clinical jaundice, as well as measure the progress of pathology after the skin clears. The estimation of bilirubin also helps differentiate between primary and secondary anemias as normal figures are found in leukemia, carcinoma, achylia gastrica, tuberculosis, nephritis and endocrine dysfunction. Finally, by its different reactions one is able to differentiate the type of jaundice by the van den Bergh method.

The normal level of bilirubin has been determined by a study of a large series of normal subjects and may be accepted despite the efforts of an occasional observer who proposes the idea that there may be a physiologic bilirubin elevation. Without exception when I have found definite increase in the blood bilirubin either hemolytic disease, or dysfunction of the biliary tract existed. While its clinical estimation constitutes, primarily, one of the useful function tests of the liver physiology, yet an increased blood bilirubin occurs in functional disturbance of other organs, hence has a place in the study of gall bladder disease.

In acute cholecystitis the increased bilirubin helps exclude other conditions producing symptoms, especially colicky pain, such as those of renal or gastric origin, of pelvic disease with radiation of pain, of coronary disease, or tabetic crises. While the conception of acute cholecystitis, or of catarrhal jaundice has long been that it was a purely localized condition in the gall bladder or the ducts alone, it is probably true that relatively few such cases do not show some involvement of the liver parenchyma. Eppinger thinks that a necrosis of the liver always exists and that the jaundice is the result of extravasation of bile in these areas which is reabsorbed by the hepatic veins, thus reaching the systemic blood stream and hence the icterus. I think that, while this explanation may be true of some cases, it certainly is not true of all cases of so-called catarrhal jaundice. The course of some cases is too brief for such pathology to have obtained and I see no reason why the cystic duct may not become acutely inflamed, producing temporary occlusion analogous to the occlusion of the nasal passages in an acute rhinitis. As well assert that a sinus infection must accompany every rhinitis as to hold that a liver necrosis must obtain in every catarrhal jaundice or acute cholecystitis. I am inclined to think

that the explanation of Fiegel and Quarner is more rational; they think that a cholangitis with functional decompensation of the liver cells is a frequent accompaniment of acute infection of the gall bladder and ducts and that the consequent obstruction to the small bile capillaries explains the jaundice. Some cases are, no doubt, explained by one or both of these hypotheses, but many are of less extensive involvement, being confined to the gall bladder and cystic duct alone.

In cholelithiasis the estimation of bilirubin is of less value. In acute obstruction of the cystic duct only absorption of the bile already in the gall bladder occurs; therefore, a rise in blood bilirubin occurs soon after the occlusion and soon disappears. During this rather transient period of increase bilirubin estimations are valuable, chiefly because of their aid in differentiation between right renal colic, tabetic crises and angina pectoris.

The statement just made that an increase in blood bilirubin in obstruction of the cystic duct is the result of absorption of gall bladder bile alone probably should be modified, since I believe that there may occur an inhibitory action on elimination of bilirubin by the liver during such an attack in somewhat the same fashion as the occurrence of a functional anuria of one kidney when its fellow has an obstructed ureter.

The bilirubin estimation tests comprise the van den Bergh, Fouchet and the icterus index. The first gives a means of estimating the bilirubin quantitatively and differentiates obstructive from toxic and hemolytic jaundice. In obstruction of the common duct the blood bile estimations are more valuable, since they serve to measure the progress of the jaundice and the van den Bergh helps differentiate between obstructive and other types. There are two types of reaction, the direct and the indirect. When the color of the serum changes promptly from yellow to a pink or violet on addition of the Ehrlich's diazo mixture it is called a positive direct reaction and occurs in icterus due to obstruction of the hepatic, cystic or common bile ducts. If no change occurs the jaundice is of the nonobstructive type. The serum is treated with alcohol before the addition of the Ehrlich's mixture in performing the indirect test; it is positive when the color changes from a pale yellow to pink, or violet and occurs in jaundice, whether obstructive or nonobstructive.

While it is believed that some hepatic damage occurs in both cholecystitis and cholelithiasis, Shattuck, Brown and Preston found normal figures in all their cases showing no jaundice and in those with common duct obstruction they concluded that the van den Bergh test served only to "verify that the increased figures of the icterus index were due to hyper-bilirubinemia." I think the van den Bergh test is of value in liver function study, but it must be remembered that it shows only impaired function and that the extent of

that impairment must be ascertained through either a dye test, or an icterus index estimation, or both.

Icterus Index. By icterus index is meant the estimation of the serum pigment, a quantitative determination of bilirubin in the blood. Its clinical value rests on a recognition of all of the factors which may produce such an increase. It is not a specific test, nor is it infallible. It determines but one function of the liver—its ability to eliminate bilirubin from the blood. It is simple, free from danger to the patient, is quickly done, accurate in its scope and has a definite clinical value in diagnosis, prognosis and treatment. Its simplicity and rapidity make it valuable for daily estimations of bilirubinemia, but is susceptible of error by inclusion in the diet of lipoids, vegetables and fruits containing a pigment.

The technique consists in collection of blood, allowing it to clot, obtaining the serum and comparing it in a colorimeter with an arbitrary standard of 1-10000 potassium bichromate solution in a fifteen mm. cell. The standard number is fifteen and the serum is diluted when the color is too deep, fifteen divided by the scale reading and the quotient multiplied by the number of dilutions.

The serum should not be kept longer than twenty-four hours before testing and not exposed to the light. The slightest trace of hemolysis fogs the reading, hence hemolyzed serum must be discarded. This can be avoided partly by using dry needles, syringes and tubes in collecting the blood. It is better to collect the blood in the tube in which it is to be centrifuged. The normal figures range from five to seven. Clinical jaundice appears when the reading reaches fifteen to twenty. Readings as high as 225 have been reported, but I have never seen one over 150. The zone of latent jaundice lies between seven and twenty.

The icterus index is increased in cholecystitis, catarrhal jaundice, duodenal ulcer, grave pneumonia, primary anemias, cardiac decompensation, malaria, typhoid and general sepsis. It may or may not be increased in gall stones, depending on the location of the stone and whether there is an accompanying cholecystitis and cholangitis. Neither are the findings constant in malignancy of the gall bladder, liver and pancreas.

Urobilogen. In 1868 Jaffe isolated from the urine and bile a substance having a definite chemical reaction with certain spectroscopic characteristics which he called urobilin. This probably is transformed in the large intestine by bacterial decomposition into urobilogen, the most of which is eliminated with the feces, some being reabsorbed from the bowel and carried back to the liver, a part being eliminated as urobilogen in the urine and should be considered as a normal constituent of urine. It is present in smallest amounts in the early morning urine and rises as

the day advances. Urobilin is never found in freshly voided normal urine.

The presence of urobilogen in the urine can be determined easily and quickly quantitatively by the Wallace-Diamond modification of the original Neubauer method. They found that the normal amount in urine lay between 1-10 and 1-20 dilutions.

Since in health the liver is able to mobilize and eliminate the bile urobilogen so that the urine normally contains only dilutions of 1-10 to 1-20, it is obvious that impairment of liver function will result in an increased elimination by the urine. Likewise, if the excretion of bilirubin is diminished because of impaired liver function it increases in the general circulation to be eliminated in larger quantities into the intestine where more is converted into urobilogen than normally and hence large amounts will, in turn, be found in the urine. These physiologic facts constitute the basis for the diagnostic significance of increased urobilogen in the urine.

Clinically, the conditions in which urobilogen occurs in increased amounts in the urine may be put in two groups, (a) hepatic and biliary tract diseases, and (b) hemolytic diseases. In the first group, then, urobilogen determinations in the urine becomes important in catarrhal jaundice, cholecystitis, cholelithiasis, cholangitis, chronic passive congestion of the liver, acute yellow atrophy, hepatic cirrhosis, miliary tuberculosis, primary and generalized carcinomatosis by metastasis, generalized suppuration of the liver and toxic states incident to pregnancy, alcoholism and acute transmissible diseases.

Increased amounts of urobilogen is a constant finding in catarrhal jaundice. The conception of Virchow that jaundice in this condition is the result of obstruction of the common duct by mucus is no longer entertained, but is due, rather, to acute parenchymatous changes in the liver cells. Increased urobilogen may not be present in all stages of the condition, but is always found at the onset and toward the end of the attack. The curve of urobilogen is characteristic. At the onset it rises to 1-90 or 1-100 dilutions, diminishes to traces, or disappears during the next week or two, then reappearing at high figures, 1-200 or 1-250 dilutions and disappearing on restoration of liver function. The presence of increased urobilogen during the jaundice excludes mechanical or obstructive icterus. Its absence for more than two weeks is evidence of mechanical jaundice; if absent for more than two weeks and if an intense green color results from adding the Ehrlich aldehyde reagent to the urine the conclusion is warranted that the obstruction is malignant. The test also helps determine the acuteness or chronicity of the liver pathology. In a chronic, progressive disease there often occurs a gradual compensatory replacement of new cellular tissue which enables the organ to function.

In cholecystitis and cholelithiasis the test usually shows normal or slightly increased amounts of urobilogen. In hydrops of the gall bladder with tumor masses, or from obstruction of the cystic duct by stone, the figures are usually normal. Such findings are diagnostically as helpful in these conditions as findings of increased amounts are in catarrhal jaundice.

Urobilogen is found in greatest amounts in acute liver changes and in exacerbations of chronic conditions; its increase is not constant in chronic processes.

The daily study of the urobilogen is more helpful in differentiating between obstructive and toxic jaundice than is a study of the blood bile. Catarrhal or toxic jaundice is nearly always the cause of appreciable increase in urobilogen.

Bromsulphalein. All dye tests are tests of excretion. The theoretical objection to their value rests on the fact that dye elimination is not a normal physiologic function of the liver. The dye is injected intravenously, is removed from the blood by the liver cord cells and excreted through the bile canaliculi.

In 1909 during a study of the results of intravenous injections of various dyes, Abel and Rowntree found that phenoltetrachlorophthalein appeared in the duodenal bile. Fourteen years later Rosenthal perfected a method for determination of a dye in serum quantitatively.

The original work was done with phenoltetrachlorophthalein, but the local and general reactions constituted serious objections to its use and bromsulphalein is now almost universally used. It measures liver function quantitatively, but is less valuable than the van den Bergh test from a differential diagnostic standpoint. It is of no value in acute cholecystitis. In chronic cholecystitis, it is of value in determining the extent of liver damage which usually occurs concomitantly. In obstructive jaundice due to fibrosis of or stone in the ducts, the dye and bilirubin tests may agree, but the dye test adds nothing to the information given by the simpler and easier bilirubin determinations.

It is of value, though not uniformly, in cholangitis and in hepatitis of non-specific origin, but this value is rather confirmatory of other findings than of independent diagnostic value. This is true also of cirrhosis. In malignancy of the head of the pancreas or gall bladder it may be of definite help in determining liver metastasis.

Bromsulphalein (phenoltetrabromphthalein sodium sulphonate) is excreted in bile to the extent of 100 percent in thirty minutes after intravenous injection. When the liver is removed in an experimental animal it remains in concentration in the blood stream for a relatively long period, appearing only in traces in the urine. It has a low toxicity systemically in the amount necessary for the test and is non-irritating to the vessel wall in a five-percent solution.

The original technique has been modified and now consists of calculation of the dosage of two mg. per kilogram of body weight. The dye may be had in sterile ampoules containing a five-percent solution. If the body weight in pounds is divided by fifty-five, the quotient represents the number of cc. of a five-percent solution required to give two mg. per kilogram body weight. It should be injected into the vein slowly, at the rate of two cc. per minute. Two specimens of blood are drawn, the first five minutes and the second thirty minutes after injection of the dye and the serum, after centrifugalization, is compared with standard solution of bromsulphalein. (Four mg. of the dye dissolved in 100 cc. water to which is added 0.25 cc. of a ten-percent sodium hydroxide solution represents a 100 percent standard and from this the desired variations of dilution may be made.) These standard solutions do not deteriorate for several months if kept in the dark. Normal rates of eliminations have been established, by studies on individuals free from hepatic disease, the average in five minutes being thirty-five percent and none in thirty minutes. Translated into clinical terms, a twenty-percent retention of the dye at the end of thirty minutes means a twenty-percent impairment of liver function. The advantage of drawing a specimen of blood at the end of five minutes, as well as at the end of thirty minutes, is because a uniformly high ratio of the five-minute elimination obtains compared with the thirty-minute elimination in advanced stages of liver disease, hence has some prognostic value.

The degree and extent of scar tissue in the liver is important from the standpoint of determining the efficiency of the liver. If the pathology is localized and of small area, or if the diseased areas, though numerous, are separated by wide areas of healthy liver tissue, hyperplasia of the normal structure will occur which compensates for the diseased cells and less impairment of liver excretory efficiency obtains. While, on the other hand, if the scar tissue is diffused and occurs early before hyperplasia obtains, then the widespread scar tissue inhibits or prevents hyperplasia and marked impairment is observed. From this viewpoint it would appear that enlargement of the liver occurring as a compensatory process promises better liver function than would be expected in an atrophic cirrhosis where the liver is really not atrophied so much as it is unable to hypertrophy. Inadequacy of the liver parenchyma seldom occurs in portal cirrhosis, for example, until an acute hepatitis is superimposed.

While bromsulphalein may be eliminated by the urine in as much as twenty percent of the amount injected in high grades of liver diseases during the following twenty-four hours, yet the amount thus eliminated in the urine shows no parallel with the retention in the blood; therefore, urinary estimations are of little clinical value.

It is my belief that the dye test has rather a supplementary value, helping to uncover false positive results from the icterus index and in assisting in the separation between obstructive and nonobstructive jaundice.

Gall Bladder Drainage. This method of study and treatment of gall bladder disease has bulked large in the literature during the past nine years. During the first two or three years of that time the method received, almost uniformly, favorable comment. Then followed a period of criticism, both honest and prejudiced, which has not yet abated. Its value as a diagnostic aid was first criticized, then doubt as to its therapeutic value, and then, finally, the assertion was made that the gall bladder could not be drained in this manner. Lyon, who was the proponent of the clinical application of Meltzer's suggestion, based on laboratory study, that the vesicle could be emptied through the influence of certain drugs placed in the duodenum, has maintained steadfastly that drainage could be accomplished. He has published recently some conclusive evidence, were further evidence needed, that a gall bladder can be drained nonsurgically. Accepting what was tantamount to a challenge a series of cases were studied jointly. A dye containing iodine was injected, x-ray pictures of the gall bladders were made, the procedure of transduodenal drainage was instituted, chemical study of the recovered bile was done and x-ray pictures of the gall bladders during the drainage were made. The evidence was unmistakable.

It is not my purpose to describe a proper technique for gall bladder drainage, but I cannot refrain from commenting to the extent of stating that failure to obtain drainage may be due to faulty technique. A physician arrived at a hospital at 9:00 a. m., informed the supervising nurse he purposed draining the gall bladder of his patient, introduced a duodenal tube, poured in a solution of magnesium sulphate, withdrew the tube and left the hospital at 9:30 a. m., with the statement to the patient in the nurse's presence that he had drained the gall bladder, is an actual chronicle. It represents an extreme example of ignorance or knavery. Drainage of a gall bladder requires time, skill acquired by the doing and a knowledge of fundamentals. Doctors continue to try to do things requiring technical skill without being willing to spend the time and money necessary to learn from one who knows. Then failure may be encountered because of a "lazy" stomach. A patient has an attack of upper abdominal pain at 10:00 o'clock at night, a hypodermic of morphine is given for its relief and an attempt to drain the gall bladder at 8:00 a. m. the following morning at the patient's home is likely to result in the tube getting no further than the stomach. A fluoroscopic study would reveal the cause of that failure. Another patient eats a full meal, the gall bladder empties during the digestive

process, a tube is passed three hours after the ingestion of the meal and another failure is recorded. A doctor passes a tube into the stomach, allows it to enter the duodenum, epsom salts solution is introduced and the free end of the tube is hung over the edge of the bed and another failure is charted.

A diagnostic study should be a logical sequence of procedures. A patient relates a story of digestive upsets; the physical examination reveals a palpable liver and tenderness of the gall bladder region; the routine urinalysis shows bile in the urine; an icterus index above normal is found; a fractional test meal study shows a normal chemistry and motility; a gall bladder drainage done on a fasting stomach shows pus cells and bile-stained bacteria; a cholecystogram with dye intravenously followed by a functional test meal shows poor concentration and ineffectual emptying capacity. In such a study there has been a sequence of necessary studies and the answer shouts for recognition in the ears of the collaborator. As a diagnostic measure gall bladder drainage may fail as may any single means of study, but it is often enough a help to warrant its employment. A man who had been free from asthma until he was thirty years of age became an asthmatic. Food protein sensitization tests were negative; bacterial protein tests were negative except for typhoid bacillus, which showed a large wheal with pseudopods; a history was elicited of an illness from typhoid at twenty-nine; a gall bladder drainage was done and typhoid organisms were recovered from the gall bladder contents; after a cholecystectomy typhoid germs were found in the removed organ. A story, almost too classic, but nevertheless true, which surely provokes the conclusion that gall bladder drainage, non-surgical, has a diagnostic value. Another case under drainage shows a few colon bacilli in the duodenal contents, many in the gall bladder bile and none in the liver bile argued for a conclusion that the gall bladder was diseased while the liver remained as yet uninvolved. Subsequent surgery established the accuracy of this conclusion and closed another case taken from the author's records which might be multiplied many times.

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CHRONIC PROSTATITIS*

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The importance and far-reaching effects of chronic prostatitis have not received adequate attention in the literature of recent years. Isolated papers from research workers and a few large clinics show a renewal of interest in this condition and its treatment. However, the commonness of this disease, its effect as a focus of infection and the difficulties presented for its cure, would seem to recommend more discussion from men who have had large clinical observation of the malady.

P. S. Pelouze¹ states that the "Prostate gland is affected in at least thirty-five percent of all adult males." Many clinicians believe the percentage to be as much as fifty or more. My personal contact with more than sixteen hundred private cases of chronic prostatitis, as well as several hundred cases of prostatic adenoma and carcinoma, has led me to believe that prostatic disease is indeed very prevalent in the adult male.

Among the earlier writers gonorrhea was attributed commonly to have a large etiological influence in chronic prostatitis. Young, Geraghty and Stevens² found the history of gonorrhea in seventy-two percent of 358 cases. Moore³ found the history of gonorrhea in eighty-three percent of 521 personal observations.

With the advent of the search for foci of infection in the prostate, cases of chronic prostatitis with no history of gonorrhea have been found more commonly than was formerly suspected.

In VonLackum's analysis of 500 cases of chronic prostatitis, he elicited a history of gonorrhea in fifty-four percent. Many students of this condition feel that gonorrhea lowers the resistance of the prostate and prepares it for the later non-specific organisms that commonly are found.

The prostate gland is a sex organ and suffers much from irregular sex acts such as: masturbation, prolonged sexual excitement without gratification, periods of excessive coitus and coitus interruptus, the latter in common practice among married people for the prevention of conception. Any or all of these conditions may produce considerable hyperemia in the prostate and the succession from one perverted act to another builds up a considerable congestion in this organ, thus preparing it for the invasion of bacteria by extension from the urethra or from the blood stream.

VonLackum believes that forty percent of prostatic infection results from foci in the teeth, tonsils, etc. Herrold⁴ found the more common infecting bacteria to be the staphylococcus albus, the diphtheroid group, the streptococcus viridans, the staphylococcus aureus, the hemolytic streptococcus and the colon bacillus. These were found on repeated culture and later corroborated by positive agglutination with the patient's serum. Occasionally more than one type of bacteria was agglutinated. He found that the agglutinable bacteria was more often lethal to mice infected intraperitoneally than the bacteria that were not agglutinated.

It would thus seem plausible that chronic prostatitis may have an etiology that is non-venereal, even when associated with a history of a venereal disease.

The symptomatology of chronic prostatitis is considerable. However, since the prostate has been considered a possible focus of infection producing other disease, many infected glands have been found of which the patients were ignorant. Besides a number of vague general symptoms such as mental depression, irritability, etc., usually classed as sexual neurasthenia, Nottaft and other European writers have divided a large symptomatology into three groups, namely—sexual, urinary and referred sensations.

A considerable number of patients complain of such symptoms as diminished sex vigor with imperfect or absent erections, premature ejaculation or painful ejaculation. I have seen a few patients with prolonged painful erections, some of which were severe enough to be classed as priapism. The so-called prostatorrhea we now recognize as a muco-purulent overflow from the infected gland or a non-specific infection of the urethral mucosa, having its source in the prostate. The organisms found in this secretion are nearly always identical to those in the infected gland. Several cases with

profuse urethral discharge and intra-cellular diplococci were proven not to be gonorrhea, since there had been no exposure nor did the cases run a typical gonorrheal convalescence. The organisms in such cases probably are diplococcus forms of staphylococcus or streptococcus, which for years I have felt can simulate the Neisserian diplococci.

The close contact of the prostate to the bladder base produces a set of urinary symptoms, as for example, frequency, urgency and occasionally slow or difficult urination, the latter symptom when there is much engorgement in the gland. Pain at the beginning, during or at the end of voiding may be manifest. Low-grade, long-standing prostatitis seems to interfere with the expulsive effort of the accelerator urinæ muscle, resulting in dribbling at the end of urination, one of the most common symptoms of prostatitis.

The most frequent of the reflex group of symptoms is the lumbar or sacral backache, often confused with the pain of sacro-iliac disease. This discomfort may extend to the hip or down along the course of the sciatic nerve. Back discomfort in a few cases has been found as high as the plane of the kidneys.

Perineal discomfort and rectal pain are very common symptoms. An unusual case under treatment at present has not been able to sit with comfort for two years. Patients frequently complain of pain in the rectum during defecation of a hard stool. The intimate anastomosis of the nerves of the prostate and urethra produce in these conditions pain in the bladder neck or at any point forward as far as the fossa navicularis. Disagreeable sensation is referred along the vasa differentia and is noticed in the inguinal region and testicle. Suprapubic discomfort is noticeable in about seven to eight percent of cases.

The diagnosis must be made from examination. Enumeration of some of the above symptoms always will suggest to the urologist the probable diagnosis, yet the urinary symptoms may be due to trouble in the upper urinary tract and many of the referred symptoms may be due to an entirely foreign condition. The sexual group of symptoms may be more dependable in indicating the diagnosis, yet some of them may be due to a mental fear or phobia instead of a real physical pathology.

Endoscopy of the prostatic urethra discloses in these cases some engorgement of the mucosa, inflamed prostatic ducts, swollen colliculus, occasionally cysts, some encroachment of the lateral prostatic lobes into the fenestra of the instrument (not equal to that of adenoma), and occasionally purulent secretion in the prostatic ducts.

Rectal palpation discloses alteration in size and consistency of the gland, nodulation and cavitation. Microscopic examination of expressed prostatic secretion and culture should be made repeatedly. It may be difficult in the hard, nodular type of gland to empty the follicles containing pus at

the first massage and not until some softening and improvement has taken place will sufficient of the prostatic fluid be expressed to make definite the diagnostic finding. However, some of the most prolific sources of pus and bacterial findings have been from prostates comparatively normal to the palpating rectal touch. Therefore, all secretions should be examined carefully.

As stated in the etiology, the various non-specific organisms such as staphylococcus, streptococcus, diphtheroid group and colon bacilli are the customary cultural finding, but inasmuch as they are rather common skin and genital types, agglutination tests with the patient's serum should be the differential test as to the pathogenicity.

Several students of prostatic infection believe that the prostate can be classed next to the teeth, nose and throat pathology as a focal point for systemic disease. One large clinic in this country believes it to be a common cause of systemic eye disturbance and a considerable number of other general disturbances. The similarity of the bacterial flora of prostatitis to that of the teeth and the ear, nose and throat makes probable that non-draining infected prostatic follicles can be focal points for systemic absorption. In my own observation reactions such as increased eye disturbance, increased neuritis and arthritic pain have resulted from too vigorous prostatic treatment. Likewise these various conditions have improved or been cured after the prostatic infection has been improved or cured.

Prostatic massage and expression of the purulent secretion is the foundation of successful treatment. The principle of drainage is as necessary here as in any other infective process. Prostatic follicles are peculiarly adapted to sealing in pus pockets by swelling and closure of their ducts. Therefore, patient and prolonged treatment is necessary before all infected follicles can be drained, should there be extensive involvement of the gland. Instillations or irrigations of the prostatic urethra following massage is advisable. Heat *per rectum* is helpful in softening a hard gland and aids in absorption of perifollicular infiltration.

When considerable fibrosis has resulted from very long-standing, low-grade prostatitis, dilatation of the posterior urethra with sounds and the Kohlmann dilator will aid rectal massage in softening the gland. Dilatation will improve the urinary stream which, in this type of prostatitis, is apt to be inhibited.

Properly prepared autogenous vaccines will raise an immunity greatly desired in stamping out this malady. To be successful with vaccine only those organisms which are agglutinated by the patient's serum should be utilized. Such vaccines have enabled us, by the administration of relatively large doses, to produce fever, increased leukocytosis and an acute exacerbation of clinical symptoms. Such reactions I believe to be beneficial in the old cases.

Finally, since prostatic infection may be secondary to other foci, these should be eradicated not only to aid restoration of the prostate, but for the systemic improvement to be expected. When more than one focus exists, it is not possible to be sure which is the principal offender.

In conclusion, we believe chronic prostatitis is very common in men. While a large percentage of cases have had gonorrhea, yet a surprisingly large percentage of chronic prostatitis cases have no history of gonorrhea. Therefore, it is doubtful whether gonorrhea is of very much consequence in its etiology. Perverted physiology of the prostate and non-specific infection probably play the greatest role in etiology.

Chronic prostatitis has a large number of persistent local and referred symptoms, yet some cases may be symptomless. Therefore, the prostate should be included in any general search for foci of infection.

The importance of the prostate as a focus of infection is well established.

Accurate diagnosis can be made by careful study of repeated cultures and examination of expressed prostatic contents including the agglutination tests for bacterial specificity.

Patience and persistence in treatment, in some cases over months of time, will be required before restitution can be accomplished.

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PRIMARY CARCINOMA OF THE MAXILLARY ANTRUM*

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Carcinoma of the maxillary sinuses is a comparatively rare condition. Most text-books barely mention that such a condition may occur and most authors of text-books on rhinology are agreed that sarcomata are not so infrequently met. Skilern, in his fourth edition of *Accessory Sinuses of the Nose* says, "Malignant tumors of the sinuses are not as common as is generally supposed, the most frequently met with being sarcomata. The maxillary sinus is the seat of malignant disease more often than all the remaining sinuses together." A search of the literature bearing on the subject would seem to corroborate these statements.

Coakley's book published thirty years ago does not mention carcinoma of the sinuses. Lennox Browne's book, published the same year, says, "Primary nasal cancer is rare and mainly epithelial." Wendell C. Phillips says, "Primary carcinoma of the nose and nasal accessory sinuses is of rare occurrence. It is less common than sarcoma, and, unlike sarcoma, it usually occurs after the fortieth year. In this location alveolar carcinoma

and epithelioma are found." This same author has reported a case of primary epithelioma of the maxillary sinus which extended through a tooth socket into the mouth.

Malignant growths are not found very frequently in the nose. Jos. C. Beck in his book on *Applied Pathology of the Nose, Throat and Ear* does not mention carcinoma of the sinuses.

Bayer, a German author, says he found four cases of carcinoma of the nose and sinuses recorded in 11,000 cases of carcinoma.

All writers on malignancy of the maxillary antrum, quite irrespective of the angle from which they are viewing the subject, unite in deploring the fact that these growths seldom come under observation until time for the successful application of any treatment long since has passed. This is, unfortunately, true in regard to malignant neoplasms elsewhere located, for it is well known that delay in seeking treatment is one of the greatest stumbling-blocks in the way of cancer control, but for various reasons when a growth of this nature arises in the antrum the time between its inception and the first application of treatment is likely to be relatively longer than with other types of neoplasms. It is my opinion that if dentists and nasal specialists would exert themselves to detect incipient cases of malignancy, much might be gained, as patients frequently are given palliative treatment for inflammatory conditions instead of surgical measures which would lead to biopsy and consequent earlier recognition.

When a growth is so completely hidden as it is in such a cavity as the antrum, the diagnosis generally is made too late for successful treatment. More than this, even when it is seen by those who should be competent to recognize it, a coincident inflammatory process may so predominate as to lead to a diagnosis of empyema of the antrum, or a polypoid condition, thus delaying the application of suitable treatment until the neoplasm has advanced hopelessly.

Another source of confusion and delay in diagnosis is the fact that the pain, which is the first premonitory symptom, is not in any way characteristic, and because of its location practically always is referred to the teeth. The tumor early causes irritation of the fifth nerve. There will be a tingling or itching over the cheek on the affected side, and this often will be followed by a sensation of weight or pressure in the sinus itself. This usually sends the patient to the dentist, and to relieve this "face ache" which is likely to be most severe about the alveolar process, a goodly number of teeth in all probability will be sacrificed without, of course, bringing about any relief. While this is going on the size of the growth will be increasing steadily and hemorrhages or muco-purulent discharge from the nostril of the affected side will offer conclusive evidence that it is not the teeth which are at fault. Actual swelling due to increase in size of the tumor mass ordinarily is a late manifestation appearing after there no

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longer can be any doubt about the actual nature of the disease.

So far it has been impossible to apply primary radiation to neoplastic growths in the maxillary antrum. It is essential that all the malignant tissue possible should be removed surgically, depending upon subsequent radiation to clean up whatever may have escaped the surgeon.

The conditions confronting the operator who seeks to remove a malignant growth from the antrum or any other accessory nasal sinus are markedly different from those he will encounter in other parts of the body. Barnes describes these difficulties very vividly when he says: "In order to avoid the dangers either of implantation or of metastasis, in operating on malignant disease it is axiomatic that the tumor should be handled as little as possible, and should be removed by an incision through surrounding normal tissues, the growth itself remaining intact. Obviously this rule must be ignored in operations upon the sinuses since no margin of normal tissue can be removed and the tumor not only cannot be taken out intact but actually must be removed piecemeal and by a process of macerations."

The practice at different clinics in various parts of the country naturally differs, but the value of radium in supplementing the efforts of the surgeon who must work under these unfavorable conditions admits of no question. At the Mayo Clinic the tumor is destroyed by the action of slow heat, a soldering-iron being carried gradually up into the antrum. Following thorough cauterization, radium salts or radium emanation is introduced directly into the antrum, either immediately after the operation is concluded, or from ten days to two weeks later.

The relative merits of the knife and the cautery as the instrument for eliminating the growth have given rise to some sharp discussions between advocates of the two methods. The cautery is preferred by workers at the Mayo Clinic, while Barnes and Greene of Boston feel that the Moure technique, which consists in cutting away all questionable tissue through a wide exposure, offers more advantages than any other method. Bloodgood, of Baltimore, asserts that his whole experience shows that if a malignant disease is cut into by a knife or curette you might as well send for the undertaker.

The case I wish to report is as follows:

Mrs. M. J., age thirty-nine, came in June 28, 1929, complaining of intermittent pain and tenderness on the right side of face—over malar bone and around right eye, with no particularly tender spot anywhere. She had been having some pain in this region, and had consulted her local physician, who found the right side of her nose filled with polypi, and sent her to see me.

Examination showed a fairly well-nourished woman who did not show evidence of extreme suffering. Her color was not good, but she seemed bright and cheerful, even when telling of severe

pain she had suffered. Externally there was a swelling over the maxillary antrum and an enlarged gland at the angle of the jaw. The mouth was normal, with no evidence of swelling or displacement of the hard palate. Transillumination showed the frontal sinuses and the left antrum of Highmore clear, but the right antrum was dark. Operation was advised and accepted. The classic Caldwell-Luc operation was the one of choice. On making my incision and elevating the periosteum it was found that the wall of the antrum was destroyed, and no chisel was necessary to enter the sinus, which was found full of granular material. This was all curetted out, and a window was made into the nose for drainage. A specimen was obtained and sent to a laboratory, the report being carcinoma. This patient later went to the Long Hospital, Indianapolis, where it was deemed wise to attempt no treatment with radium or other means.

The patient died February 1, 1930, a horrible death and a frightful picture to observe.

FRACTURE OF THE NECK OF THE FEMUR*

(The Importance of Correction of the Outward Rotation of the Leg)

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INDIANAPOLIS

Twenty years ago Whitman presented his plan of the treatment of the fracture of the neck of the femur in which abduction, slight internal rotation and traction were the essential factors. Since that time this method has been practiced and taught almost to the exclusion of other types of treatment. It is known universally as the "abduction" method. As so often happens when one factor in a method is used to designate that method other factors which are equally as important to the success of the treatment are minimized or entirely lost. To the general practitioner the abduction method of treatment of the fracture of the neck of the femur means only abduction.

It is the purpose of this paper to show that abduction alone will not reduce the fracture of the neck of the femur; that correction of the external rotation to a position of slight internal rotation is equally as important as the correction of the adduction by abduction in order to bring the fractured surfaces of the neck of the femur into contact that union may occur. A very large percentage of the nonunions which follow the use of the "abduction" method are due to the failure of the surgeon to realize that abduction corrects only the angulation and that reduction is dependent upon the correction of the external rotation.

A study of the radiogram of the normal hip is essential to interpretation of a radiogram of a fractured hip. The femoral angle is that angle formed by the intersection of lines parallel to the long axis of the shaft of the femur and of the neck of the femur. This angle is one of 120 to

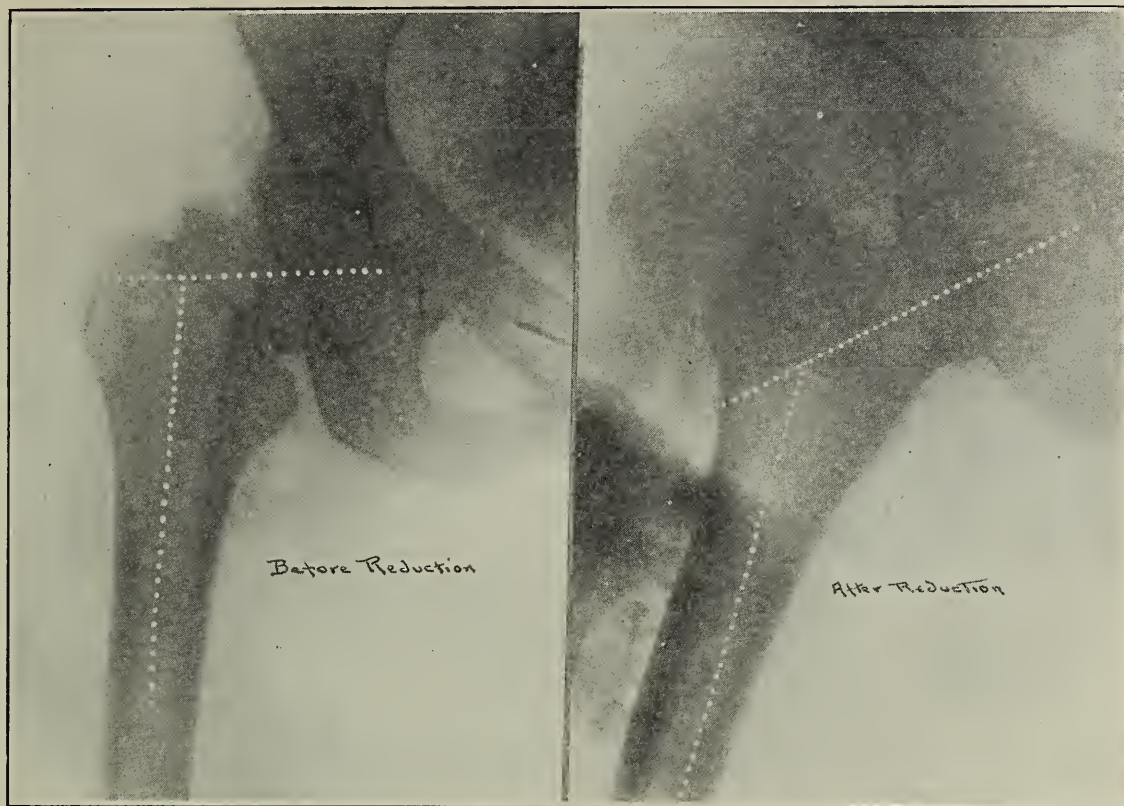


FIGURE 1.

130 degrees. It will be noted also in the normal hip that with the leg in a position of neutral rotation the neck of the femur is fairly long, the greater trochanter is some distance from the rim of the acetabulum and little of the lesser trochanter is shown.

In the radiogram taken immediately after a fracture of the neck of the femur the femoral angle will be one of 90 to 100 degrees. This lessening of the angle is due largely to the abduction

change of direction of its long axis from a transverse to an antero-posterior direction. The approximation of the greater trochanter to the acetabular rim is in part real but largely apparent through its rotation inward and backward by the outward rotation of the leg. The lesser trochanter is, of course, increased in size by its rotation from behind the shaft of the bone.

It is a well-recognized fact that to have a solid union at the line of fracture in a bone the raw or fractured surfaces of that bone are to be in contact with one another. In the study of the radiogram of the fractured neck of the femur in which there is present outward rotation of the outer fragment (the leg) it is evident that the fundamental factor of contact of the raw surfaces does not occur; that the raw surface of the inner fragment facing outward and abducted comes in contact with the posterior surface of the outer portion of the neck, and that posterior surface is covered with periosteum, the raw surface of the outer fragment being directed forward and slightly inward. Union will not occur or if it does it will be of a fibrous type, ill suited to carry the weight of the body. These two raw surfaces can be brought into contact only by correcting the outward rotation of the leg, that is by bringing the leg (outer fragment) into a position of neutral or slight internal rotation. Abduction alone will not reduce the fracture but merely corrects the angulation.

"The spica is retained from eight to twelve weeks, or until it may be assumed or demonstrated by roentgen-ray examination, that union is suffi-

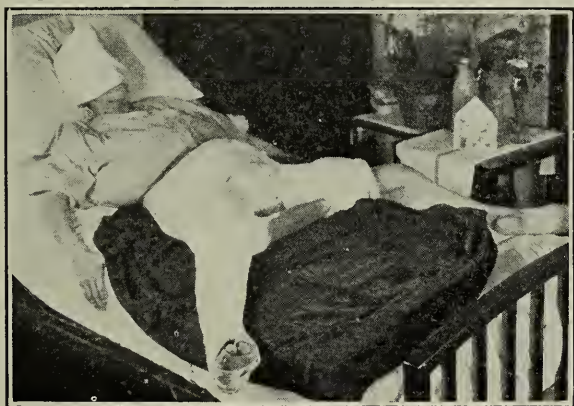


FIGURE 2.

of the inner fragment and somewhat to the adduction of the outer fragment. It will be noted also that the neck of the femur is apparently shorter, that the greater trochanter lies close to the acetabulum and that more of the lesser trochanter appears. The apparent shortening of the neck of the femur is due entirely to the outward rotation of the outer fragment, the attached portion of the neck being fore-shortened through the

ciently firm to permit movement of the limb." (Whitman.) After the removal of the spica weight bearing is not permitted for several weeks and during this period the outward rotation of the

terior surface of the outer fragment, the raw surface of which is directed forward.

ORCHITIS AND EPIDIDYMITIS* (Treatment with Ortho-iodoxybenzoic Acid)

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In 1892, Victor Meyer¹ and his co-workers began the investigation of the pharmacological action of o-iodoxybenzoic acid and its precursors, o-iodbenzoic and o-iodosobenzoic acid. Later, Lovenhart and Grove, in an effort to find a substance that could be injected intravenously to produce increased oxidation in cells, and thus increase their normal physiological action, continued this work. Most of the drugs previously investigated were found to be too toxic for intravenous use, many forming methæmoglobin, and others, such as the chlorates, were not reduced in their passage through the body, and their oxygen was thus not available for physiological action. Their work on o-iodoxybenzoic acid showed it to have a high percentage of available oxygen and when administered intravenously did not produce methæmoglobin nor cause embolus formation.

From the formula Arkin² determined that there was 11.43 percent available oxygen and this free oxygen should make the preparation very bactericidal. He demonstrated its bactericidal action against *B. typhosus*, *B. coli*, *B. pyocyamus* and *staphylococcus aureus* and showed it stimulated antibody formation in rabbits.

It was not until the last few years that the practical application of o-iodoxybenzoic acid in clinical medicine was established by the work of Young and Youmans⁴ on arthritis. It was while working with cases of gonorrheal arthritis that I found it to be of benefit in orchitis and epididymitis.⁵

Preparation and Administration: The patients comprising this group were all hospitalized cases. Those who had received treatment previous to admission were observed a sufficient time to determine the effects of the treatment. No accessory treatment was given except to those cases which had an acute gonorrhea, and they received the routine treatment for it. All cases were confined to bed until the effects of the treatment were apparent. All cases were required to wear a suspensory. No sedatives or hypnotics were employed.

The drug was used in the form of the ammonium salt which was prepared for intravenous use by adding sufficient sterile distilled water to the salt to produce a solution of one percent concentration. The solution was prepared not more than fifteen minutes prior to injection, which in all cases was made into the cubital vein.

All patients with two exceptions received one gram of the drug on alternate days which was

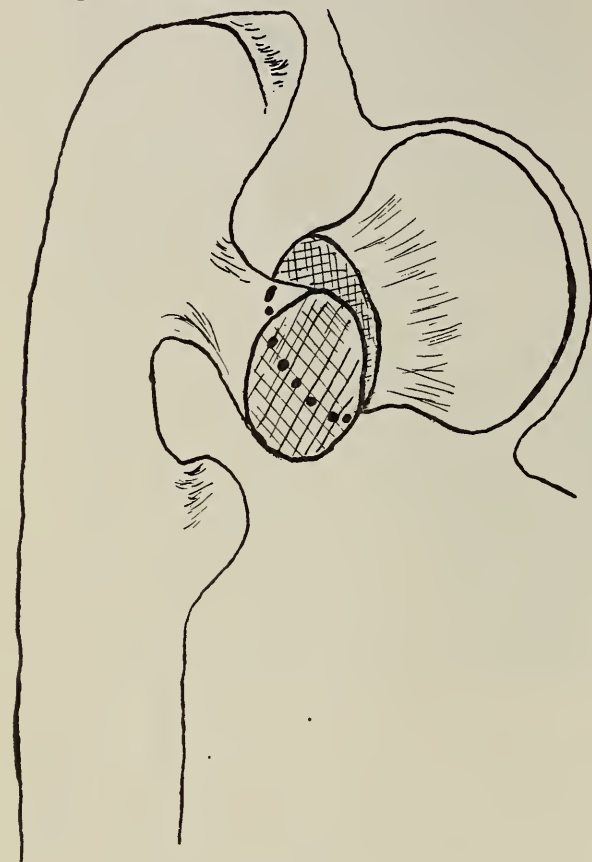


Fig. 3.

leg, which will tend to occur through the weight of the bed clothes and the normal position assumed by the foot while in bed, should be prevented by keeping sand bags along the outer side of the leg. This will prevent angulation in the line of fracture or the formation of a painful callus.

Figure No. 1 is that of radiograms taken before and after reduction of a fracture of the neck of the femur. In that taken before reduction will be noted the change in the size of the femoral angle, the approximation of the greater trochanter to the rim of the acetabulum, the apparent shortening of the neck and the full size of the lesser trochanter. In that taken after reduction the restoration of the normal position of the greater trochanter, the full length of the neck and the smaller size of the lesser trochanter by internal rotation of the outer fragment.

Figure No. 2 shows the type of splint with the leg in abduction and with the toes pointing straight upward.

Figure No. 3 is a schematic drawing to illustrate the relation of the fractured surfaces of the neck. The raw surface of the inner fragment lies in contact with the normal periosteal covered pos-

*Research Department Indianapolis City Hospital.

given by the syringe method in about three minutes' time. The two cases received half-gram doses at three to seven-day intervals. Immediately following the injection the patients were confined to bed for a few hours and a hot magnesium sulphate pack was applied at the site of injection to prevent thrombosis of the vein.

Case Reports: Case 1. L. J., white, male, laborer, age twenty-nine. He developed acute gonorrhea seven years ago. Urethral discharge developed again two weeks prior to admission and was followed a week later by orchitis and epididymitis. He entered the hospital on January 23, 1927, and received treatment for his gonorrhea, which cleared up in about two weeks. The left testicle at that time was about three times normal size, painful, hot and very tender to pressure. The scrotum was reddened and hot over this area. The right testicle was tender but apparently not swollen. His temperature was 98.6 degrees. On February 13, 1927, he received one gram of ammonium o-iodoxybenzoate intravenously. This was followed by a moderately severe reaction and by an almost immediate relief of pain and marked diminution of tenderness. The following day the right testicle became swollen, hot and painful. He received two more injections at seven-day intervals and after the first there was a complete absence of pain and almost complete absence of tenderness. The swelling in both testicles gradually diminished and a few days after the last injection they had practically become normal in size. The epididymitis remained indurated and harder than normal at the time of release from the hospital.

Case 2: F. Q., a white male, age thirty-six. He had had acute gonorrhea several times. His last attack was seven weeks previous to admission and he developed a right acute epididymitis a week before admission. He was admitted to the hospital on February 25, 1927, with an acute right epididymitis and orchitis and arthralgia in both knees and ankles. He received one gram of ammonium o-iodoxybenzoic acid on admission which was followed by the usual burning reaction of the mouth, nose, eyes, stomach and testicle. The following day there was marked reduction in pain and tenderness of the parts and some reduction in size with the testicle feeling softer to pressure. Five days later a second injection was given which resulted in complete relief of pain and tenderness and the patient was discharged a week later with the testicle normal except for a slight induration of the epididymitis.

Case 7: D. C., white male, age nineteen. He developed an acute gonorrhea on January 4, 1927, which cleared up after ten days of treatment. On February 3, 1927, he noticed a slight urethral discharge and the right testicle soon became swollen and very painful. The following day he was admitted to the hospital. The testicle was about twice normal size, very tense and constantly painful. His temperature was 99.8 degrees. He re-

ceived three one-gram injections at two-day intervals. After the first injection there was marked diminution of pain so that the patient was able to rest comfortably. The testicle was also much less tender to pressure. The pain and tenderness continued to decrease with subsequent injections. He was discharged on February 14th, with the testicle normal in size.

There were only twelve cases studied and in ten of these one-gram doses of the drug were given at two-day intervals providing the patient's heart and blood pressure were normal. All of the cases were of known gonorrheal origin except one, which was a case of chronic orchitis in a man sixty-eight years of age with a prostatic hypertrophy. This case responded nicely after a few injections. None of the cases returned to the hospital because of a recurrence of the condition.

Results: The most striking result was the relief of pain in the acute cases. This occurred as a rule shortly following the first injection and subsequent injections relieved the pain permanently. Patients who had been unable to rest or sleep because of the intense pain usually were relieved in a short time after the injection. Those cases having an elevated temperature experienced a chill following the injection and received the most prompt relief from pain. The temperature as a rule dropped after the chill and remained normal thereafter.

The decrease in tenderness was marked after the first injection in most instances. Those cases in which the testicle was so sensitive to pressure that it was difficult to make an examination could be examined easily in most instances shortly after the injection of the drug. Usually, after the second or third injection the tenderness practically was gone.

The swelling was last to be relieved. Occasionally the day following the first injection it would be noticed that the testicle was less tense and after the second injection there would be definite softness of the testicle which continued to become softer and decrease in size during the following days. The wearing of a suspensory, which was the only accessory treatment employed, was to aid in reducing the swelling. Smith⁶ points out in his paper the similarity of ammonium o-iodoxybenzoic acid to the salicylates which increase the permeability of loops of intestine for solutes and draws the hypothesis that o-iodoxybenzoic acid may act similarly in the reduction of edema.

As pointed out in a previous paper,⁵ the drug produces a general leukocytosis which is chiefly in the polymorphonuclear cells. The red cell count is not affected materially.

Upon the temperature there usually was a slight rise following the injection, but this soon returned to normal. Those cases which had an elevated temperature at the time of injection often experienced a chill and this was followed by a reduction

of their temperature usually to normal, where it remained.

The drug usually caused a slight increase in the respiration, which was due to the burning sensation in the mouth and nose. The effect on blood pressure was short and variable. In some cases it would be elevated slightly and in others it would decrease a few points.

The reaction resulting from the intravenous administration of the drug was in most cases rather severe and uncomfortable for about fifteen minutes. The reaction, as a rule, began when about thirty to forty cubic centimeters of the one-percent solution had been injected. It began with a sensation of heat beneath the tongue and rapidly involved all the mucous membrane of the mouth, gradually increasing to a burning sensation. This burning sensation extends to the mucous surfaces of the nose and eyes and if the patient has a coryza it is likely to be quite severe for a short time, increasing the congestion and producing a headache. Most of the patients experienced a burning in the epigastrium after about forty cubic centimeters had been injected. In some of the cases there was nausea and even severe cramping which resulted in a purging effect. Several of the patients complained of burning in the chest, chiefly substernal, and with the sensation that the heart was being affected. More than half of the cases noticed a burning in the testicle which was never severe. All perspired freely during the reaction and for a short time following. The reaction began to subside about fifteen minutes after the injection and was followed by a period of moderate exhaustion. The rapidity with which the injections were given seemed to increase slightly the intensity of the reaction but decrease the duration.

Some of the cases will experience partial or complete thrombosis of the vein unless precautions are taken against this. It can be prevented by applying a hot magnesium sulphate pack over the site of injection for about two to four hours.

Summary: Ortho-iodoxybenzoic acid owes its activity to its high percentage of available free oxygen, which probably increases cell activity and makes it a highly germicidal agent.

When used intravenously it produces a severe burning reaction, chiefly of the mucous membrane and inflamed areas. It is analgesic, reduces edema and relieves muscle spasm.

Both acute and chronic cases of orchitis have responded to treatment and although the series is small it should appear to warrant further trial of the drug.

The prevention of venous thrombosis can be attained by the application of a hot magnesium sulphate pack at the site of the injection for a short time.

This series of cases was studied at the Indianapolis City Hospital and I am greatly indebted to Dr. L. G. Zerfas, director of clinical research, for his cooperation.

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THE SCHICK REACTION*

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Schick's test is a means of determining the susceptibility of an individual to diphtheria. It depends upon the introduction into the skin of a carefully measured amount of potent diphtheria toxin. The test is not difficult to perform, requires little time, and is highly reliable. It has been of great scientific value in showing the relation of diphtheria susceptibility to age and cultural groups.

The classical work of Klebs, Loeffler, Roux, and v. Behring demonstrated the etiological relationship existing between the diphtheria bacillus (*Corynebacterium diphtheriae*) and the disease. Schick in 1913 after the work of Marx and Roemer devised a new method of gauging the resistance of an individual to diphtheria.

Schick injected minute doses of toxin into the skin and noted the reaction at the site of the injection. The lack of a reaction indicated the presence of sufficient antitoxin to neutralize the toxin and the subject was considered a Schick negative, or immune reactor. A red patch occurring at the site of the injection, however, indicated that the toxin had not been neutralized and the subject was a Schick positive, or susceptible reactor. The test as he performed it consisted of an intradermal injection of 1/50 M.L.D. (minimum lethal dose for a 250-gram guinea pig) of potent toxin contained in 0.1 cc. of normal saline.

Diphtheria toxin is the product of the diphtheria bacillus and may be obtained by growing the organism in broth culture. The bouillon or broth consists of a dilute veal or beef infusion to which has been added small amounts of peptone and salt, the whole of which is then adjusted to a suitable reaction by accurate titration. This media, after sterilization in large, shallow flasks which give a maximum of surface, is ready for planting. The organisms multiply rapidly in an incubator at body temperature and within a week they will have covered the surface with a thick layer or pellicle. The toxin which is dissolved in the broth is separated from the organisms by filtration and is allowed to age in a refrigerator until its strength has become stabilized.

The unit of potency of toxin is the minimum lethal dose ("M.L.D.") or the minimum amount which when given subcutaneously will kill a 250-

*This the fourth paper endorsed by the Diphtheria Prevention Committee of the Indiana State Medical Association.

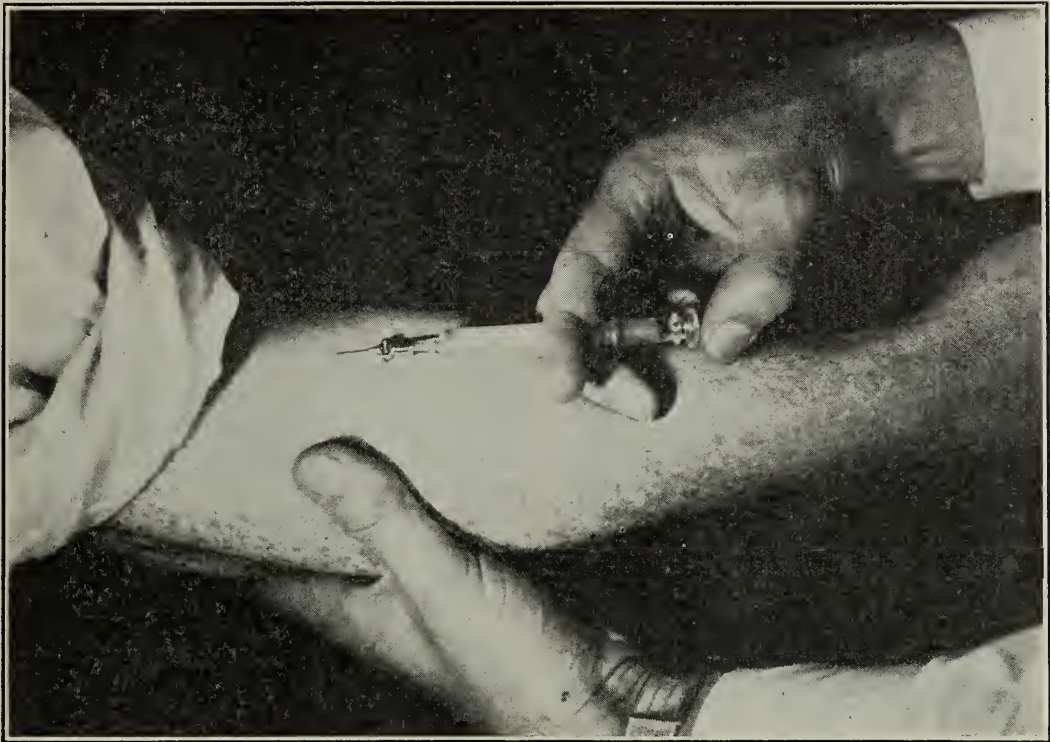


FIG. 1. CORRECT POSITION FOR GIVING THE INJECTION.

Note the fact that the needle is practically parallel with the skin. When the syringe is held between the two fingers as indicated the thumb is always in convenient relation to the plunger. The fingers of the left hand of the operator should keep the skin of the patient's forearm taut until the injection is started.

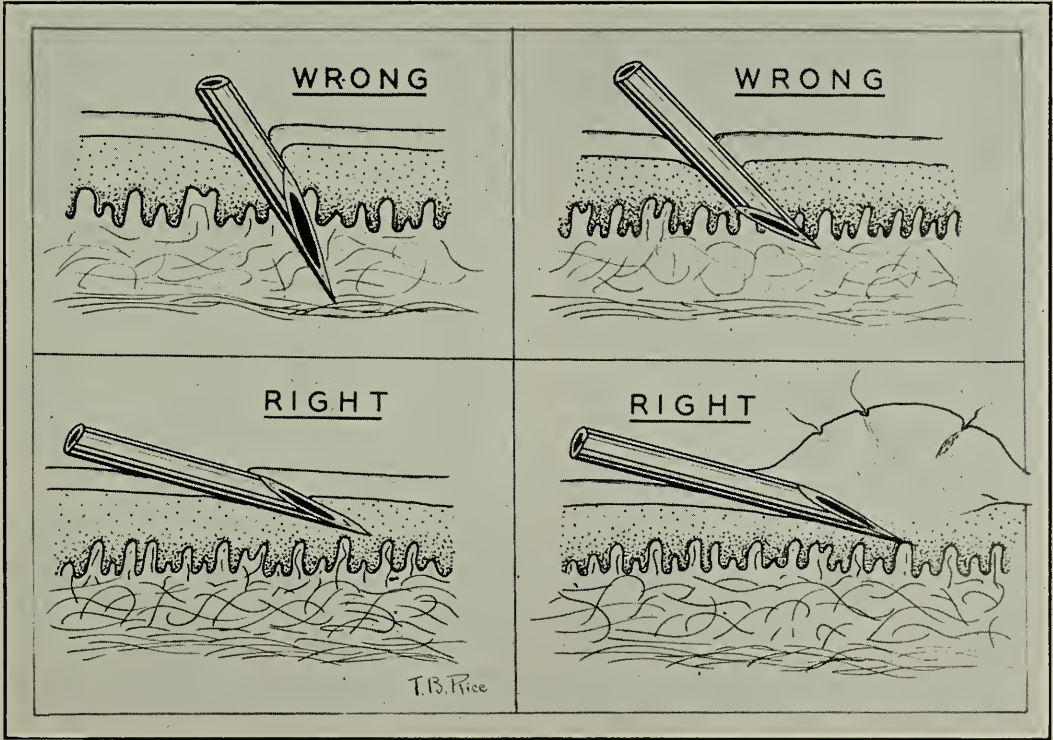


FIG. 2. THE CORRECT RELATION OF THE NEEDLE TO THE LAYERS OF THE SKIN.

It is extremely important that the needle be very sharp and smooth.

gram (half-grown) guinea pig. Toxin prepared as described may vary rather widely in potency.

Because of the unstable character of diphtheria toxin when diluted, as is necessary for the Schick test, it is supplied to the physician undiluted along

with a vial containing the proper amount of normal salt solution. In making this dilution and preparing for the test one should observe closely the instructions given by the manufacturer. In-

asmuch as the various marketed preparations differ somewhat, we are giving herewith a statement of Surg. G. W. McCoy,¹ Director of the Hygienic Laboratory, United States Public Health Service, Washington, D. C., concerning diphtheria toxin for the Schick test and its control: "This is distributed in packages containing not over one hundred doses, each human test dose containing 1/50 or 1/40 of a minimum lethal dose for guinea pigs.

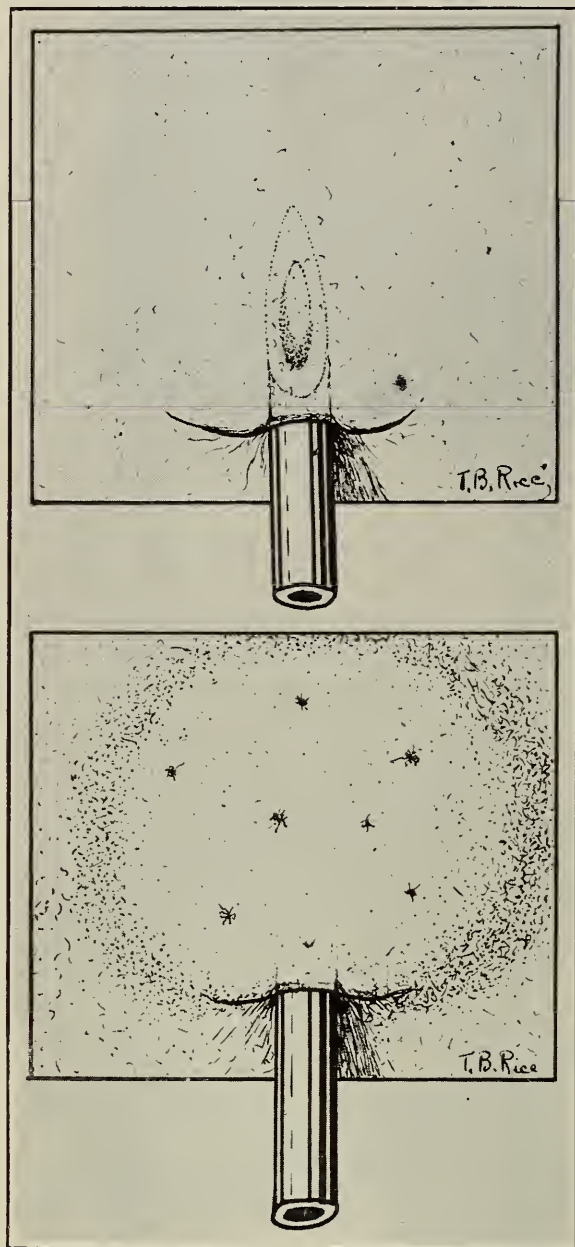


FIG. 3. THE CORRECT RELATION OF THE NEEDLE TO THE SKIN, FROM ABOVE.

Note that the lumen and bevel of the needle can be seen dimly through the transparent epidermis. It disappears from view as the fluid enters. When the bleb is of full size it has a whitish appearance. Usually it will show from three to six dimples at the site of hair follicles.

The human dose is diluted to 0.1 or 0.2 cc. for use, according as it contains 1/50 or 1/40 M.L.D. In testing the material the toxin is diluted as for human use, and forty or fifty human doses, depending upon the type of package, are given subcutaneously, to guinea pigs weighing about

these guinea pigs should die between the sixtieth and ninety-sixth hour with the usual lesions of diphtheria poisoning."

The technique which we have found most simple and convenient is by no means the only proper procedure. The injection is made most easily on the antero-lateral or flexor surface of the forearm a short distance below the elbow, the site being cleansed thoroughly with soap and water or alcohol. It is better to avoid, when possible, areas with much natural pigmentation.

The back of the forearm is held firmly with the left hand and the fingers draw tightly the skin over the anterior surface. The syringe held lightly between the first and second fingers of the right hand, with the bevel of the needle up, is rested on the subject's arm as in Fig. 1. A slight forward motion of the fingers holding the syringe will cause the needle to slip easily into the skin. If the syringe and needle are held nearly parallel to the forearm the point of the needle will separate the epidermis and dermis (Fig. 2) and not enter the deeper layers.

As soon as the bevel has passed into the skin the injection may be started. If the insertion is made properly the bevel and lumen of the needle will be faintly visible below the epidermis (Fig. 3) and will slowly disappear from view as the fluid separates the tissues. As the toxin begins to enter the tension on the skin made by the fingers of the left hand should be released gradually. Holding the skin too tightly while injecting will accentuate the slight stinging sensation experienced as the fluid separates the layers of the skin.

The manufacturer's instructions as to the dose (found on each package) must be followed closely. After experience, the bleb which forms beneath the epidermis (Fig. 2) may be used as a guide to the dosage and will expedite the test. Until one becomes familiar with the size of the bleb an accurate small hypodermic (tuberculin) syringe should be used. The needle should be small and the point very sharp; that which we have found most satisfactory is a stainless steel, one-half inch, No. 26 gauge needle of popular make. Special Schick test syringes are useful but not really necessary for accurate work.

Many workers who have given large numbers of tests have come to consider that the changing of the needle for each individual is unnecessary, the needle being wiped off carefully with alcohol or one-percent iodine solution between each injection. Private practice, however, demands that a freshly sterilized needle be used for each patient and one should be sure before an injection is started that the new needle contains toxin rather than the water of sterilization.

Since a small percentage of individuals have been found to react to substances in the broth other than the toxin a control test of heated toxin is advised. The control material already diluted and heated is supplied by the manufacturer. The

250-80 grams. At least seventy-five percent of injection is made in the same manner as described for the toxin test but on the opposite forearm. This control test is necessary if one desires to differentiate accurately between the pseudo-reactions and the true toxin reactions. Many physicians wishing to make the test more practical have found, however, that the control test can be dispensed with and the pseudo-reactions can be ruled out by careful reading.

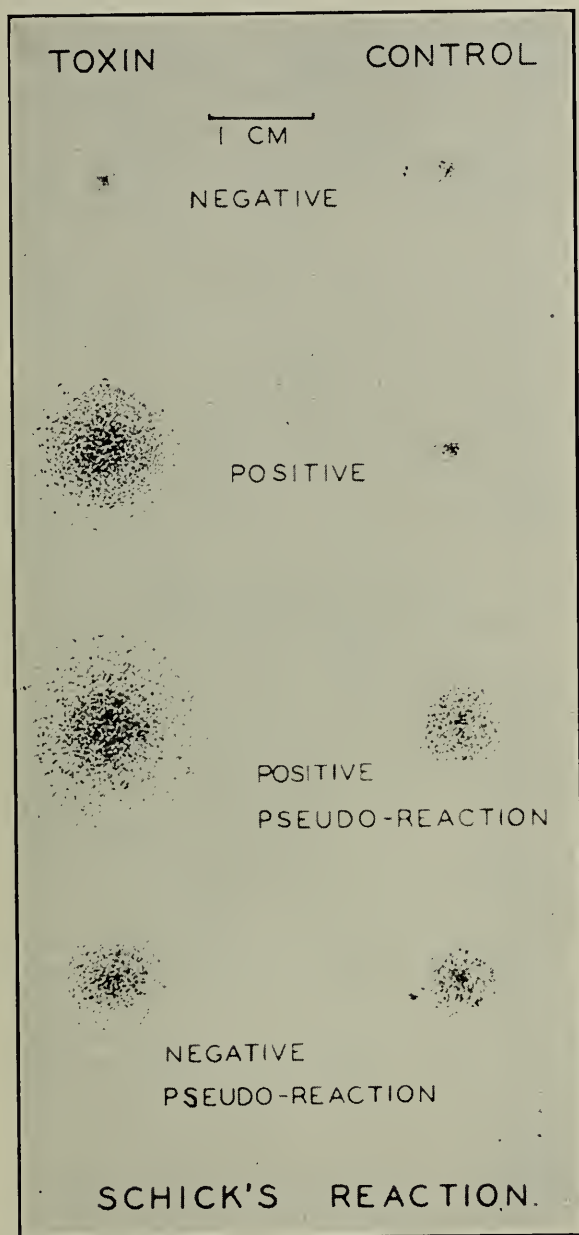


FIG. 4. THE APPEARANCE OF THE VARIOUS REACTIONS.

Zingher² has described the results of the test in the following manner: "The positive reaction is characterized by a circumscribed area of redness and a slight infiltration which measures 1.0-2.5 cm. in diameter. It persists for seven to ten days, and on fading shows a superficial scaling and a persistent brownish pigmentation. The pseudo-reaction can be distinguished clinic-

ally in most cases from the true reaction. It appears much earlier, is more infiltrated, less sharply circumscribed owing to a secondary areola around it and disappears in twenty-four to forty-eight hours. It leaves only a faintly pigmented area, which in our experience never shows superficial scaling."

If no control is used the final reading should be made on about the fourth day (three to five days) when the true toxin reaction is at its height, and the pseudo-reaction has in most cases faded. A positive combined reaction (Fig. 4) which represents a true reaction superimposed on a false reaction is seen occasionally. In such a case evidence of a positive reaction, namely, superficial scaling with pigmentation, should remain after the pseudo-reaction has disappeared.

Clinical diphtheria in definitely Schick negative reactors is very rare. Routine Schick testing will eliminate many who otherwise would receive unnecessarily the immunizing treatment. It is of the utmost importance that a susceptible individual be not classed as immune, thus creating a sense of false security. Most errors of this nature are found to be due either to faulty technique or to the use of toxin that has deteriorated.

If the toxin is injected under the skin a positive reaction will not follow as a rule. A white bleb which disappears within a few minutes always should occur when the injection is made. The appearance of the bleb and its size is the best guide to correct technique. Unless the injection is made too deep bleeding from the needle prick is infrequent. All needles and syringes should be sterilized by boiling or by autoclaving and not by the use of chemical agents. In addition they should be allowed to cool.

Diphtheria toxin is very susceptible to light and heat and should at all times be stored in the dark at ice-box temperature. Deterioration occurs very rapidly in the diluted toxin and it is therefore supplied in concentrated form. The dilution should be made only when required for dilute toxin cannot be relied upon for more than twenty-four hours even with the most careful precautions. A too high percentage of negative reactors among young children, especially those who have never received a prophylactic treatment, should at once be a warning that the toxin may be weak.

The Schick reaction as reported by Wright³ is as effective in negroes as in whites. He states that in practically all cases pigmentation is increased and that superficial scaling occurs in all positive cases. He reports that except in rare instances the naturally pigmented skin does not interfere greatly with the test. Experience will be a great aid in correct interpretation, however.

Many physicians have come to feel that the Schick test is superfluous and do not believe in its universal use. This view has much merit and especially so where young children are concerned.

Most investigators have confirmed the work of Zingher,⁴ who reports 60-85 positive reactions in children up to five and six years of age. He believes that all children of this pre-school and early school age should receive a prophylactic treatment without a previous susceptibility test. A negative Schick test three to six months after the immunizing procedure is necessary before pronouncing them free from the danger of infection. Park⁵ states that a negative Schick test gives almost as much assurance for future years as for the present.

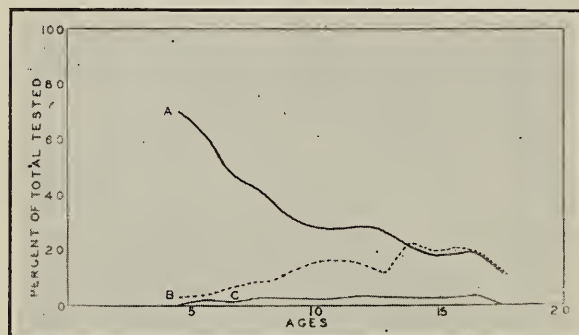


FIG. 5. CURVES WHICH SHOW THE POSITIVE REACTIONS AND PSEUDO-REACTIONS TO THE SCHICK TEST AT DIFFERENT AGES. (Zingher, A., *American Journal of Diseases of Children*, 25:392-405, 1923.)

(A) The percentage of positive reactions shows a rapid fall between the ages of four and ten years.

(B) Negative Pseudo-reactions are more frequent in the older children.

(C) Positive Pseudo-reactions are infrequent and show little relation to age groups.

The percentage of positive reactions decreases as the age increases. In older children and adults the use of the Schick test will prevent a great deal of unnecessary prophylactic treatment. To illustrate the advisability of Schick testing before prophylactic immunization of children older than early school age a graph (Fig. 5) has been prepared from the figures of Zingher,⁴ who carefully recorded the results of Schick test on more than 60,000 children. It shows the rapid fall in the percentage of Schick positive individuals between the ages of four and ten. In addition it shows the percentages of pseudo-positive and pseudo-

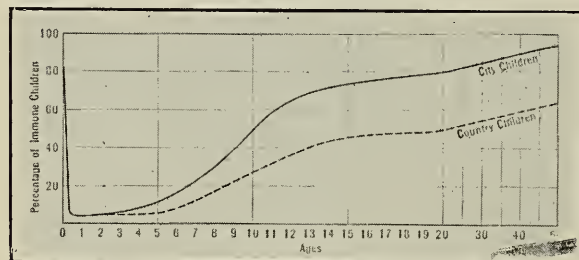


FIG. 6. CURVES WHICH SHOW APPROXIMATELY THE PERCENTAGES OF PERSONS WHO ARE IMMUNE TO DIPHTHERIA AS INDICATED BY THE SCHICK TEST.

A comparison of rural and city immunity.

negative reactions that may be expected. It is to be noted that pseudo-negative reactions tend to become more frequent as the age increases.

The diphtheria bacilli, although probably small in number and in an avirulent form, are commonly found in normal throats. These frequent contacts without gross infection are responsible for a gradual increase in natural immunity and the resulting

negative Schick reaction. City children with greater possibility for more frequent contact with the organism will, when Schick tested, show a higher degree of immunity than children of the rural districts (Fig. 6). In the cities children from the exclusive residential districts are found to be more susceptible than the children from the poorer sections and the children of foreign parentage.

Conclusions:

(1) The Schick test has been of much value in determining diphtheria susceptibility in various age and cultural groups.

(2) It is not recommended as a routine test before giving prophylactic immunization in children under ten years of age.

(3) The technique of the test is adapted readily to the limitations of the general practice of medicine.

(4) The immunity resulting from the prophylactic use of diphtheria toxin-antitoxin or of diphtheria toxoid should always be verified later by a negative Schick reaction.

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SPECIAL ARTICLES

DIPHTHERIA DEATHS FOR MAY, 1930

Four counties had diphtheria deaths during the month of May—Knox, Lake, Monroe, St. Joseph. This makes five deaths already this year for Knox county, three deaths already this year for Monroe county and four deaths this year for Lake county. St. Joseph enters the black list for the first time. Marion county, by far the largest county in the state, had no deaths during either April or May.

Considering the size of Knox and Monroe counties, their diphtheria death rates obtained already this year are disgraceful. In this connection it is interesting to note that Monroe county has reported one case of diphtheria in 1930 and three deaths, a case mortality of 300 percent, if we can depend upon the reports which have come from that county.

Diphtheria deaths by counties for May and for the first five months of 1930 are given below:

| County | Total Deaths So Far in 1930 | Deaths in May, 1930 | County | Total Deaths So Far in 1930 | Deaths in May, 1930 |
|----------|-----------------------------|---------------------|-------------|-----------------------------|---------------------|
| Allen | 1 | 0 | Montgomery | 1 | 0 |
| Clark | 2 | 0 | Morgan | 1 | 0 |
| Clinton | 1 | 0 | Perry | 1 | 0 |
| Delaware | 2 | 0 | Randolph | 1 | 0 |
| Dubois | 1 | 0 | St. Joseph | 1 | 1 |
| Elkhart | 2 | 0 | Sullivan | 2 | 0 |
| Greene | 1 | 0 | Tippecanoe | 1 | 0 |
| Howard | 1 | 0 | Tipton | 2 | 0 |
| Jay | 1 | 0 | Vanderburgh | 4 | 0 |
| Knox | 5 | 1 | Vigo | 1 | 0 |
| Lake | 4 | 1 | Warrick | 1 | 0 |
| LaPorte | 1 | 0 | Wayne | 1 | 0 |
| Lawrence | 1 | 0 | White | 1 | 0 |
| Marion | 9 | 0 | | | |
| Monroe | 3 | 1 | | 53 | 4 |

The Need of Accurate Reporting of Disease and Death

The work of the Diphtheria Prevention Committee is hampered considerably by the fact that the morbidity records are very unreliable. It is the desire of the committee to keep the physicians of the state and of the respective communities well informed concerning the progress of the disease in various parts of the state. Counties with high morbidity and mortality rates have a heavy responsibility which should not be side-stepped.

A careful study of the monthly reports made by the State Board of Health reveals some interesting discrepancies due beyond doubt to the fact that physicians do not regard the reporting of a case of diphtheria as an important matter. For example Monroe county had no cases during January of this year, but reports one case and *two* deaths from diphtheria during the months of February and March. Lawrence county reports a death but no cases for January. Knox county reports two deaths and one case for the months of January and February, and for the first quarter three cases and three deaths—a mortality of 100 percent. Tipton county reports a death for March but no cases for February or March. Clark county has a death in February but no cases for January or February. Warrick county has exactly the same combination. In one or two of these cases it is barely possible that the death was from a case reported in 1929, but it is evident that such hardly can explain all of these irregularities. In all there were 377 cases and 42 deaths reported during the first quarter of 1930, a case mortality of 11.2 percent—an excessive figure in these days of exact diagnosis and highly effective antitoxin.

What is the explanation of these surprising figures? There are three possible explanations, none of them being complimentary to the medical profession:

- 1. That the cases are not being diagnosed—a very serious matter.
- 2. That the cases are not being reported after having been diagnosed—clearly a violation of the health laws of the state.
- 3. That the cases are not being treated as well as would be expected in this day and age—a most serious charge.

Concerning the last of the possible explanations much of the blame must be put upon the parents who do not call the physician until the disease is rather far along. Holt gives the following figures taken from the Report of the Health Department of Chicago covering a number of years:

| Antitoxin given | Cases | Deaths | Mortality |
|------------------|-------|--------|-----------|
| 1st day | 355 | 1 | 0.27% |
| 2nd day | 1,018 | 17 | 1.67 |
| 3rd day | 1,509 | 57 | 3.77 |
| 4th day | 720 | 82 | 11.39 |
| 5th day or later | 469 | 119 | 25.37 |
| Totals | 4,071 | 276 | 6.77 |

It will be noted that mortality rates based on the available figures for the first quarter of 1930 in Indiana are practically the same as when antitoxin was given on the fourth day—surely too late. The total rate given above is only a little more than half of our corresponding rate.

It is not the intention of the writer to criticize the treatment of diphtheria as practiced by the physicians of the state, but merely to call attention to the probability that bad reporting is giving the profession a black eye. We believe that the reason for these disgraceful figures is to be found in the failure to report cases. This is, however, a very serious matter for the reason that quarantine, the protection of the public, epidemiological control, accurate vital statistics and the practice of public health generally depend upon the reports which only the physician in charge can give. Failure to report a recognized case of diphtheria is a direct violation of the Quarantine Law passed in 1903. Section 1 of this law says, "Any physician called upon to attend a sick person, and who finds the cause of such sickness to be of a contagious or infectious nature, or if the disease is ordered to be reported in the rules of the State Board of Health, such physician shall immediately report the facts to the secretary of the board of health having jurisdiction." Section 3 of the same law specifically mentions diphtheria and membranous croup as being reportable diseases.

T. B. R.

THE Women's Auxiliary of the American Medical Association was active in Detroit. In fact around headquarters it sometimes seemed, judging from the activity manifested, that the A. M. A. should be an appendage to the Women's Auxiliary. Anyway, the women have just as much fun as the men when it comes down to politics and scrapping for office, and while we don't believe that at present the women are as good losers as the men yet with a little experience they can give the men some lessons. All joking aside, the members of the Women's Auxiliary can do a great deal of constructive work if they will get busy. As a sample of what might have been accomplished we desire to say that if the Women's Auxiliary had taken a hand in the matter it could have prevented the passage of the Veterans' Bill by both houses of Congress, and by such act the women would have proved that sometimes they can outshine their husbands in constructive work. If the women of the Auxiliary pay less attention to pink teas, musicales, self adulation and scramble for office and publicity, they can accomplish an enormous amount of good for the medical profession and incidentally the public serviced by the medical profession. In fact we believe that the women can accomplish more than the men if they get busy and are united in a common cause.

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Devoted to the Interests of the Medical Profession of Indiana

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EDITORIALS

THE PASSING OF PHYSICAL DIAGNOSIS

Anyone who is interested in the subject of teaching medicine cannot help but observe the difference between the methods of teaching of today and those of twenty years ago. Twenty years ago the clinical method, wherein the patient constituted the nucleus around which all investigation centered, was the method in vogue. This method required the cultivation on the part of the student of his sense of touch, sight, hearing and smell. The cultivation of these special senses required intimate contact at the bedside or clinic with the naked body of the patient. In the process of acquiring skill in a physical examination, the student acquired a vocabulary by which he could express his findings following his examinations.

Today the method in vogue is the laboratory method. The center of the student's interest is shifted from the patient to the test tube and microscope. In the student's diagnostic vocabulary today icteric index, P. S. P., B. M. R., etc., have replaced the many terms expressive of physical signs of former days.

At a recent staff meeting where the program consisted of the presentation of interesting cases by the visiting staff, the patients were wheeled into the amphitheater on carts. Not a single clinician demonstrated his methods of making a physical examination in order to arrive at a diagnosis, yet the cases all lent themselves to this method of making a diagnosis. The time was taken up largely by a discussion of x-ray pictures and other laboratory findings. If the same group of cases had been presented in the same institution fifteen years ago by the staff, a careful analysis of all the objective physical findings in the case would have been demonstrated first, and then whatever laboratory data were available would have been presented.

The reason for this difference in methods of arriving at a diagnosis is understood easily. The age of great clinical teachers of medicine appears to have passed. We do not see them any more about our medical colleges. The men with powers of keen observation and logical reasoning, based upon a wealth of experience at the bedside, and checked by autopsy findings, no longer play the leading roles in the education of medical students.

Sleek-haired young men with a rich vocabulary of technical terms and laboratory equations direct the student in his diagnostic efforts. When one attends a clinic conducted by men trained under such methods, he can expect to find the major emphasis laid on laboratory tests, for they have had but little training in methods of physical examination.

It would of course be folly to underestimate the great value of the laboratories' contribution to scientific medicine. In fact medicine's sole claim to being a science rests upon the laboratory. It is well to remember, however, the effect which the scientific method of training medical students has had and is having on the personal characteristics of the physician. It does not develop men of broad, human sympathies whose approach to the problems of illness is by way of the patient himself rather than a series of chemical reactions or shadows on a sensitized plate. Any medical student who has been denied the inspiration that comes from personal contact with broad-minded clinical teachers of medicine misses the most valuable part of a medical education.

X-RAY FILM STORAGE

It is easy to forget and no doubt many of us who store and handle x-ray films already have forgotten the dangers of film storage, though if we will recall some of the disasters like the Cleveland clinic and several others of similar character, we will realize what can happen.

Fire inspectors are handicapped in many ways and often have no opportunity really to know what conditions are, and do not have authority to improve them. Some day some of the authorities will visit our offices and warn us of the dangers connected with film storage and then we should do as instructed. We should even go one better for our own protection and for the protection of our communities, by throwing out all the nitrate base films and begin using safety or the acetate base films which we can file like paper and which will not explode or give off dangerous gases. We may object to the added expense, but what is expense when it may be the means of preventing disaster and saving life? We should ask our fire insurance agents for the data of the National Board of Fire Underwriters, and the Ohio Inspection Bureau on the "Nature and Action of Gases from Decomposing Films." The Indiana Inspection Bureau also will be glad to furnish information concerning these matters. It also is very important to physicians to have the x-ray department of hospitals use the safety methods. These matters should be brought to the attention of the governing boards of hospitals so they will realize the dangers of not taking the necessary precautions. Films should be stored for at least three years. They are part of the patient's clinical record and are often of much value. Some have important legal aspects. Others are

valuable in teaching. Why then should we not seriously consider the safe storage of them? The human equation always enters into these film fires, and even though every necessary precaution is taken, such as safety doors, sprinkler systems and air vents, such precautions may fail, as they did at the Cleveland Clinic. The use of safety films will stop all this. We will be free of much expense in constructing storage space, and also of much worry.

Some may say that the use of safety films adds to the expense of x-ray examinations. The general public is paying for these examinations. When the x-ray was used first it was said that it never would be of practical use because of the expense. Today it is considered one of the most valuable methods and an important aid in making diagnoses.

If these film fires are not stopped there is no doubt that there will be legislative action, and this may cause much ill-advised restriction. The subject should be studied carefully and the men interested in roentgenology should inform those in authority concerning the difference in the types of x-ray films and that safety films means what the name signifies. Only then should ordinances regulating the storage of the old cellulose nitrate films be put into effect. Let us all hope that this difference will be made so that safety films will be used universally, and then roentgenology will become a safe specialty of medicine, with the public having no fear of it.

FREE CLINICS

In *Venereal Disease Information*, issued by the United States Treasury Department, Public Health Service, April 20, 1930, there is an interesting article by Minor Miller, M.D., Director of Venereal Disease Clinics at Evansville, Indiana. The report shows evidence of careful analysis of the business management for the year 1928, and includes a report of 20,870 treatments at an approximate cost of fifty cents each. The clinic is supported principally by the city of Evansville, by Vanderburgh county, and an appropriation by the Indiana State Board of Health, the combined expenditure on the part of the three agencies amounting to \$12,270. The clinic collects from patients from \$2,000 to \$2,500 annually, which is turned into the general fund of the city of Evansville, making the actual cost approximately \$10,000 per year. The report deals chiefly with the executive and business side of the work in the clinic and says:

"There are two questions that we always are asked with regard to our conduction of the clinic. First, do we investigate the ability of the patient to pay? and, second, Do we have any social service in connection with the clinic? The answer in both instances is 'No.'

"We have not yet found the individual who can, or at any rate who will, tell us what gauge to use to measure a patient's pocketbook whereby we may say who shall be refused on the grounds of ability to pay."

The report states that "Evansville is a town whose inhabitants are chiefly factory workers," and discusses "the average weekly wage, when

lay-offs and other absences are included is \$14."

It is difficult to understand why industrial centers make necessary exceptions to the rules which the writer states when he says:

"It is, of course, to be desired that the patient take private treatment if he can and will do so, but that society has the right to safeguard itself from communicable disease is the inalienable right of society."

Making all due allowance for the apparently habitual attitude of mind acquired by physicians not in private practice and depending for income upon salaries from official positions, and making due allowance for the "inalienable right of society," it is nevertheless difficult to understand why pauperism should be encouraged by making no effort to determine whether patients are able to pay or not. The author of the report frankly acknowledges that the ability of the patient to pay is *not* investigated and that there is no social service in connection with the clinic. He says:

"Most of the criticism that we have received is involved in these two points, and we are accused of that most heinous of all crimes known to the profession, namely, 'state medicine'."

His further statement that the physicians of Evansville have gone on record as approving the retention of the clinics does not at all signify that the local profession is in favor of rendering gratuitous service to those who are able to pay. The physicians of Evansville are of a high class and have too clear a conception of the function of a publicly supported clinic to approve free medical service to those who are able to pay, especially where no effort is made to obtain the facts.

High-sounding reference to the "inalienable right of society," and remarks about "state medicine," do not alter the fact that gratuitous professional service for those who are able to pay is wrong. The generous attitude of the medical profession of Evansville, and the approving resolutions by luncheon clubs, is qualified frankly by the writer when he says:

"They are not satisfied that all our methods are right—nor are we—but we believe that we have made a start in the right direction."

It is obvious that some form of wisely applied social service should not increase the expense of the Evansville clinic and would avoid gratuitous service to those able to pay, and the view that rightly directed social service can be obviated by employing "a police officer in the capacity of attendance officer, and since one policeman looks very much the same as another, we are able to avoid such exposure" does not explain why no effort is made to refuse gratuitous service to those able to pay.

REDUCING THE COST OF ILLNESS

Dr. William J. Mayo may have stirred up a hornet's nest, but he uttered a truth when he said that "the cold fact remains that the cost of hospital care is prohibitive to the patient of moderate means, and that hospitals today are not designed primarily for the common man, or the poor man who is indeed fortunate when he occupies a free bed, but is in danger of finding a diminishing number of such beds available for his needs." He

also voiced another sentiment worthy of attention when he said that "the financial burden of sickness on the common man, so far as hospital and nursing care is concerned, can be reduced greatly by properly planned and equipped hospitals, by introducing economical methods of caring for the patient, and by compelling the proper authorities to pay for the care of charity and poor patients unable to meet the expense. The municipal and county authorities should not spend their funds from the charitably minded, or add to the burden of the sick already over-taxed." The latter observation is well worthy of serious consideration.

Aside from the necessity of finding some means of furnishing hospital care at a price that is within the means of the man in moderate circumstances, there is an obligation on the part of medical men to adopt such procedures as will lighten the cost of sickness to the man of ordinary means. This can be done by avoiding hospitalization in a very large percentage of cases that now regularly go to a hospital but can and should be cared for in the average home. Many patients are sent to a hospital purely to add to the convenience of the attending physician who talks glibly about giving his patients the superior advantages of a hospital but who in reality is suiting his own convenience and catering to a lazy habit of making it easier for himself by placing some of his responsibilities upon a hospital. It is quite true that among the poor the homes are not suited for illness, but in the average home fully seventy percent of all illness, as stated by Billings, can be cared for just as well as in the hospital. It may be that the attending physician will have to do a little more work, be inconvenienced more, and very properly do some laboratory work that he now refers to the hospital, but in the end he will get greater satisfaction and certainly more compensation.

Then there is the matter of nursing which seems to be one of the great drawing cards for the hospital, though it is a well-known fact that except in the more serious cases the average hospital patient gets very little attention that cannot be given by an ordinary maid. Aside from all this there is a way out of the difficulty by employing hourly nursing which is growing in popularity in many cities. In fact, the medical profession should encourage the development of hourly nursing for that great number of patients who are not sick enough to demand the services of a full-time nurse but do need the short-time service. There also is a great need for the so-called practical nurse, or one with limited training, and this is a subject that has received scant consideration at the hands of the medical profession and yet is a very great factor in reducing the cost of illness. Again, quoting Billings, there are only about ten percent of sick people who require the services of a trained nurse.

In all of this discussion concerning the

lowering of the cost of illness, the harpoon with its jagged barbs constantly is thrown into the medical man, as though he and he alone were responsible for the high cost of illness through his exorbitant charges. Well, he is to blame for the high cost of illness in that he constantly and unnecessarily makes illness more expensive for people by permitting or even insisting upon having a lot of frills for the sick that are superfluous and unnecessary, and in the majority of instances is aiding him in his laziness and unwillingness to bear the responsibility that he should bear. He is cutting his own nose off and doesn't seem to know it, and now that the public is beginning to squeeze him he ought to turn over a new leaf and try to solve the problem by adopting measures that not only will be an economic saving to the patient but in the final analysis be beneficial to himself.

SOCIALIZING MEDICINE THROUGH THE VETERANS' BILL

The Detroit session of the A. M. A. is now a matter of history. The outstanding feature of the session was the discussion of various features pertaining to the oncoming of state medicine. Some of the delegates were more or less panic stricken concerning the possibilities of having state medicine foisted upon us in the very near future as a result of the passing of the Veterans' Bill by Congress, but as one delegate who voiced our own opinion said, "We are locking the barn after the horse is stolen." A few medical editors, and in particular the writer, have been trying for several years to awaken the medical profession to the danger, but their pleadings have fallen upon deaf ears. In fact not once but several times during the past few years the writer was told by prominent members of the medical profession that discussion of the question of state medicine was a good thing to use to fill up space in a medical journal but that there wasn't the slightest possibility and but little probability that state medicine ever would be an issue in this country. How times have changed, and the very men who were so optimistic concerning our security now are the ones who frantically are trying to get the medical profession to adopt means and measures to stem the tide.

The Veterans' Bill, passed by both houses of Congress but finally vetoed by the President, was one of the most viciously socialistic bills ever introduced in Congress, for the reason that there was no consistent reason for creating so many unnecessary hospitals as provided for by the bill, and no excuse for such shameful wastefulness and extravagance, to say nothing of putting such an enormous financial burden upon the taxpayers of the country. Of particular interest to the members of the medical profession is the fact that had the bill passed it certainly would have established state medicine immediately, for the veterans and all their relations could not use one-tenth part of

the hospital facilities provided for by the bill and in consequence the ultimate solution would have been to throw the hospitals open to the public for treatment at government expense. It took a lot of courage for the President to veto the bill, and no doubt he was very thankful for the telegrams from the American Medical Association in which it was pointed out that he was correct in all his conclusions concerning the viciousness of the bill, but the President virtually was forced to approve a compromise bill that is little better insofar as its bearing upon state medicine is concerned. As constructive criticism we say that the medical profession as a matter of self preservation should have arisen *en masse* and opposed the bill.

What is being done by state, municipal and private enterprises in socializing medicine cannot be mentioned in the same breath with what now is being attempted by the United States government and largely without much objection on the part of the medical profession. When we come right down to facts the Veterans' Bill, with its iniquitous features, originated and was foisted upon Congress by a handful of Veterans of the World War, but they had influence enough to have the bill favorably received and finally passed by both houses of Congress in spite of protests by a considerable representation of the Veterans themselves. It is assumed that many congressmen had less interest in giving the veterans care than they had in giving themselves an opportunity to feather the nests of constituents or influential interests, or perhaps even themselves indirectly, for it is not likely that the average Congressman is going to lose a chance to profit directly or indirectly when the government is to expend millions upon millions of dollars that would have been spread out all over the country. It always has been a mystery to us why the medical profession, represented by over a hundred thousand reputable physicians, is so impotent when it comes to bringing pressure to bear that not only is in the interests of the public good but for the preservation of the medical profession itself. The Veterans' Bill never would have gotten to first base, to use baseball slang, had the medical profession as a unit offered objection to it, and the one way to offer objection is for every individual practitioner of medicine to get busy in entering his protest and getting his friends to do likewise. The compromise Veterans' Bill is better than the original, insofar as its harmful effect upon the medical profession is concerned, and yet that bill is a very forward step in the direction of socializing medicine.

In reality the medical profession has its back to the wall and is fighting for its own preservation and independence. The fact that socialized medicine never has been and never will be a success, and that the people will pay a severe penalty if socialized medicine is adopted, need not be discussed now. The question for us to decide is,

what are we going to do to save ourselves from annihilation as an independent profession within the next few years. If we are to be a mere cog in governmental machinery then practically every physician in the land will be forced to accept a salaried position subject to the vagaries of politics. If we are to prevent such a fate then we must unite as we never have united before in fighting something that not only spells the death sentence for the individual practice of medicine, but holds out not only the possibility but the probability of working infinite harm to the public.

SORDID HOSPITALS

Oftentimes there are occurrences in some of our best hospitals that lead to the general impression that hospital managements are grasping and sordid and guilty of actions conducive to a wholly unnecessary increase in the cost of illness. For instance, why do hospitals follow the example of some grasping hotel proprietors and insist upon putting patients into the most expensive rooms in spite of a request for accommodations of moderate price? Also, why do some of our best hospitals insist upon having the most trivial operation in the well-appointed surgery, and charge from ten to twenty dollars extra for it, when the operation, petty in character and perhaps requiring but a moment of time, could without inconvenience to the hospital attendants, and with perfect safety, be performed in the patient's room, in which case there would be no justification for an extra charge? Why should some of our best hospitals find it necessary to tack on so many extras to the patient's bill when there is a great hue and cry about the necessity of lessening the cost of illness? We admit that the carrying charges of any hospital, if it is well managed, are enormous, but we do not and never will believe that it is necessary for any hospital to tack on a lot of extras to its patients' bills that are superfluous, or that should be a part of the regular service for which no extra charge is made.

A MILITANT ORGANIZATION

For fear that many physicians in Indiana will not read the report of the secretary of the A. M. A., in the *Journal of the A. M. A.* for May 17, 1930, we are reproducing that portion of his report which refers to a militant organization which we think is worthy of the serious consideration of every reputable medical man in the country. That portion of the report to which we refer is as follows:

"In reports submitted to the House of Delegates at annual sessions in previous years, the need for compact and efficient organization of the medical profession has been emphasized especially. Developments of the year that has passed since the last meeting of this House have shown clearly that the need for unified action and authoritative expression through truly representative channels is more pressing than ever before. Gratifying progress has been made by several constituent county associations and by a fairly large number of component county medical societies in developing programs designed to carry out the fundamental purposes of medical organization. It is to be hoped that the example of these earnest and progressive societies will stimu-

late many others to awaken to the need for concerted action and to assume to the fullest extent the responsibility that rests on them in the promotion of scientific medicine and in combating those influences that would retard its progress and deprive the public of its benefits.

"It has come to be the sport of pot-boiling writers to use the columns of such magazines as are open to them to slur medicine and its practitioners in articles in which truth is distorted and facts are ignored. The radio is being used by charlatans and faddists to further nefarious schemes or to propagate fanciful theories, as well as to belittle science and to slander physicians. Well-meaning philanthropists promote projects of various kinds without knowledge of what is involved in the practice of medicine and without regard for biologic principles. Occasionally articles, seemingly sponsored by organizations composed of physicians, appear in the public press containing unwarranted statements that apparently are intended to exalt the few by reflecting unfavorably on the profession as a whole. Committees and commissions and conferences, self-created, are busying themselves with studies and appraisals confined to relatively narrow fields, with small regard for the largest factors in the great picture of general economics. Princes of industry are advocating the application of mass production methods and strictly commercial rules in the practice of medicine, even in the face of the fact that the revolutionary processes they have instigated and developed in business have glutted markets, mortgaged the buying power of the people and made necessary the adoption of artificialities in commerce that are directly opposed to established economic principles. Governmental policies, already adopted or under consideration, are designed—purposely or not—to retard the further development of scientific medicine and to interfere with its practice in the manner that will best serve the public interest.

"Just why this siege has been laid against medicine with its resultant outpouring of proposals of redaction, restriction and degradation of a great humanitarian profession is hard to explain. It may be that in the honest attempt that has been made to educate the public in matters pertaining to medicine we have reached the stage in the program where a certain element of the public feels that it knows enough to make the rules and to dictate the course of procedure. Certainly some of the proposals offered, by individuals and by groups, indicate that a little knowledge is, as it has always been, a dangerous thing. The situation is one that demands that efforts for the information of the public shall be continued and persisted in until the truth shall prevail. This means that compact and efficient organization that will command the undivided loyalty of all reputable physicians must be perfected and maintained, through which information based on scientific fact can be disseminated and misinformation from any source whatever can be combated.

"Our state associations and county societies must continue and intensify efforts for the improvement of their own members to the end that every one of them may render the best service possible and that each in his everyday contacts can contribute helpful instruction to the public in whose interest medicine has ever sought to serve. Each of them, in its own jurisdiction, must strive to become all sufficient for the needs of their members in their relations to medicine, their relations to each other, and in their relations to the public, to government and to philanthropy. This will mean organization in counties and states through which any untoward conditions that may exist in the profession itself will be corrected. It will mean organization that will provide stimulation for scientific advancement of the individual member and that will promote the dissemination of knowledge for the improvement of the profession as a whole. It will mean organization for safeguarding the material interests of its membership, which are in no manner different from the interests of the public. Our societies and associations in counties and states must offer leadership and helpful guidance in matters pertaining to public health, which is distinctly a field of medicine. They must, as organized bodies, carefully scrutinize and constructively criticize programs of government or of philanthropy, cooperate actively in any plan that is good, and persistently oppose every plan that will retard the development of the art and science of medicine or prevent the extension of its benefits in a manner that will serve the best interests of all the people.

"The American Medical Association, as a national body, is striving to serve as a militant organization and to utilize all of its resources to best advantage for the promotion of medical knowledge and for its application for the good of all mankind. Through its publications it brings to physicians the best that is produced in scientific medical literature, together with a mass of informative material, gathered from many parts of the world, concerning movements and conditions affecting medical practice, public health, and the relations of physicians in the life of the times. Through one of its monthly periodicals and through pamphlets and leaflets that are distributed widely the Association attempts to give practical and useful information to the public. These efforts are supplemented by the daily use of the radio, by correspondence involving replies to thousands of inquiries from laymen, and by service to the lay press. Through its councils and bureaus and committees, the fields of medical education and hospitals, pharmacy and chemistry, physical therapy, health and public instruction, legal medicine and legislation, and frauds and quackery in medicine are being covered as fully as facilities will permit, and there is a constant increase in the work and a constant improvement in the service of all these departments. Intimate contact is maintained wherever possible with other groups and organizations concerned in any manner with public health or medical practice. The Association does not hesitate to expose and to condemn any movement, however sponsored, that it believes to be opposed to the public interest or to the interest of its own members as physicians to the public, nor does it withhold

its cooperation in any movement designed to promote human welfare.

"The conditions of the times demand that a more militant spirit shall be developed in every unit of our organization to the end that each in its own sphere will become more efficient in its work for advancing the science of medicine, for improving the means and methods of its application, for bettering the public health, and for opposing anything and everything that would reduce a useful and honorable profession to the status of a trade or of a socialized group of hirelings without professional ideals, and therefore without initiative or ambition for further scientific advancement, and without the spirit of humane service."

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

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We want THE JOURNAL to serve you.

THE August number of THE JOURNAL will contain the preliminary program of the Fort Wayne session of the Indiana State Medical Association. The final and official program will be published in the September number. The dates for the session are September 24th, 25th and 26th.

THE A. M. A. has gone on record as favoring the adoption of a standard of physical fitness for licensing automobile drivers. This is in keeping with conservation of life and limb. However, in addition to standards for licensing drivers there should be strict enforcement of the laws covering reckless driving, and the combination of "booze" and an automobile driver.

THE Department of the Interior of Canada is furnishing gratuitously automobile road maps and other information that it is thought will prove valuable to those who desire to visit Canada, no matter what the pretext. We also note that thirsty Americans are aided by being given information as to how alcoholic beverages may be purchased, and the government liquor stores of Canada will furnish gratuitously booklets giving prices of alcoholic beverages of every kind.

E. M. SHANKLIN, M.D., the secretary of the Lake County Medical Society, is enterprising and resourceful. He has had published in the daily papers the following: "If you contemplate calling on your physician on Thursday, June 12th, do so before 7:30 p. m. as he wishes to attend a meeting of his county medical society at Gary Mercy Hospital on that evening. A regular attendance at these meetings is your assurance that your physician is keeping in touch with modern medical and surgical progress. Lake County Medical Society."

PHILADELPHIA has been selected as the place for the 1931 session of the American Medical Association. The officers for the ensuing year are as follows: President-elect, Henry S. Judd, Rochester, Minnesota; vice-president, Louis J. Hirshman, Detroit, Michigan; speaker of the House, Frederick C. Warnshuis, Grand Rapids, Michigan; vice-speaker of the House, Albert E. Bulson, Fort Wayne, Indiana; secretary, Olin West, Chicago; treasurer, Arthur A. Hayden, Chicago. The Philadelphia session probably will be held the first week in June of next year.

MANY American physicians are amazed at the results secured by a Vienna surgeon in the treatment of fractures as described at the Detroit session of the A. M. A. Novocain local anesthesia is employed, and rustless wire is used to bring broken bones together. A plaster cast without padding is employed. In some leg fracture cases the patient is able to walk almost immediately after the operation, and in most cases the patient is discharged from the hospital at the end of two or three days and walks without the aid of a cane or crutch. Very naturally there is a very large economic saving not only in man power but in dollars and cents.

THE A. M. A. at the Detroit session again has placed its stamp of disapproval upon the Shepard-Towner Act and all its substitutes. The stand was taken that such legislation is wasteful, extravagant, devoid of beneficial results and has a tendency to promote communism. The state should be left to formulate its own health programs, with the cooperation of the United States Public Health Service if so desired by the state, and free from any inducement or compulsion in the way of federal award or coercion. The Association approves of the Coolidge doctrine of state rights and responsibility. It is opposed to anything which gives room for snooping interference by Washington with the private affairs of domestic life.

THE American Standard Insurance Corporation of Indianapolis has been soliciting doctors to purchase an accident policy at a particularly favorable rate. Upon investigation we find that the company was licensed by the insurance department of Indiana on June 10, 1930, and that it is an Indiana *mutual* assessment company. The commissioner of insurance says that he knows of no assets of the company other than the deposit of two thousand dollars made with the insurance department. Well, as the old saying goes, "Investigate before you invest," and if any kind of a company does not prove that it has assets which you think sufficient to take care of all legitimate demands, then it is a good plan to refuse patronage.

WE have received a letter signed by several members of the Indiana State Medical Association

testifying to the fact that the physician who made a hotel in Windsor, Canada, his headquarters while attending the Detroit session of the A. M. A. actually was seen eating English mutton chops, a privilege which he previously had declared very solemnly could not be enjoyed in the United States. Nothing was said about having ale or beer with the mutton chops, and as we know that English mutton chops with all the frills, beer and ale included, were available in dozens of places in Detroit we wonder just why so many of our medical friends preferred to go to some inconvenience in making their headquarters in Windsor, Canada, during the Detroit session.

A PHYSICIAN in the President's cabinet has been advocated from time to time and recently the American Medical Editors' Association, at the Detroit session, passed a resolution bearing on the subject. We are inclined to agree with some of the lay newspapers that representation in the Cabinet would do little more than inject politics into medical affairs, and it is a well-known fact that labor, which clamored for and finally got representation in the Cabinet, has not been benefitted by a seat in the President's Cabinet. Where will this matter end if the lawyers, school-teachers, physicians, dentists and many others finally secure seats in the Cabinet, and probably one is just as much entitled to such representation as the other? We do not feel that a medical man in the President's Cabinet will be any gain.

In this age when there is a decided tendency to knock the regular medical profession and no come-back results, we believe that some effort should be made to "sell" the reputable medical profession to the public. At first blush one might say, "We must do that by advertising," and therein lies the problem. We do not doubt the truth of the old slogan, "It pays to advertise," but the question arises as to where we are going to draw the line. Some individual physicians now are exploiting themselves, and deserve severe censure for it. However, there can be no objection to mass advertising of the right kind, which of course means no extravagant or misleading statements. Doctor Shanklin's idea of impressing the people with the thought that the medical man who attends his county medical society is progressive is worthy of serious consideration.

PRESIDENT MORGAN of the A. M. A., in his address before the House of Delegates, emphasized what we have been preaching for some time, that physicians should cease to encourage people to ask for or demand unnecessary hospitalization, and thus cut down the cost of illness. Dr. Frank Billings, that practical and experienced physician of national reputation, also reiterated what he has said on numerous occasions that eighty percent of the sick people require neither specialists nor hos-

pitals, for they can be cared for in their own homes by any well-trained family physician who is energetic and resourceful. All of which deserves serious consideration, for when you get right down to facts, doctors are responsible directly or indirectly for the high cost of sickness, and not because their bills are so high but because they encourage frills and unnecessary attention.

THE so-called Coffey and Humber "cancer cure" has stirred up a world of comment and criticism in the lay press as a direct result of the ill-timed and misleading exploitation given the subject in the lay press. It is now announced through trustworthy sources that both Doctor Coffey and Doctor Humber were from the very first explicit in pointing out that they do not claim to have a cure for cancer and that their work is largely experimental. It was not their intention to report the results of their work until a year or more had elapsed, but the lay press learned about the work going on and not only exploited it but misrepresented it. It is said that all treatments have been given without charge, and Doctors Coffey and Humber have not accepted a case unless accompanied by a statement from a physician that it is non-operative and will not respond to radium or x-ray.

CONGRESS has just created the National Institute of Health, as a part of the U. S. Public Health Service, through the passage of a bill in Congress which not only furnishes funds for a working basis but permits the secretary of the treasury to accept gifts of money from private individuals over which he acts as a trustee. The bill provides for the establishment of a fellowship so that the highest type of workers may be engaged in research work. The Institute will concentrate in Washington the best of the country's medical and scientific research workers and will provide a sort of clearing house of research findings in the battle against disease. A fund of \$750,000 has been appropriated for the new buildings and equipment. The Institute will be under the control of the surgeon-general for the specific purposes of purely scientific research to ascertain the cause, prevention and cure of diseases affecting mankind.

THE Association office asks for the cooperation of every physician who is a member of a county medical society in carrying on a special drive to eliminate itinerant food faddists from Indiana. These faddists usually go under the title of "Doctor" or "Professor," come into a city, carry on a flaring publicity and advertising campaign, give a series of free lectures attacking the medical profession, and end by selling many dollars' worth of health pamphlets and books and taking much money out of a community. They often get before luncheon and civic clubs and in some cases such

men have addressed scientific and professional societies. Among these men are Dr. Paul Sampson, National Health League; Bernarr Macfadden and his agent (*Physical Culture*); Dr. Frank McCoy, chiropractor, health and diet advice; Prof. Paul C. Bragg, scientific health specialist; Dr. R. A. Richardson, oculist, lecturer; Dr. J. D. Levine (has an M.D. degree in Illinois), "The Health Messenger."

IT seems to be a favorite sport of some radio broadcasting stations to permit patent medicine venders and medical quacks to malign the reputable medical profession. Recently we overheard the representative of a patent medicine manufacturer say over the radio that doctors always find some surgical operation that is necessary whether there are indications for it or not, and he told the old threadbare story of the woman who had what was called rheumatism of the foot, and for which doctors successively removed tonsils, teeth and the appendix, only to discover a little later that the whole trouble was due to a nail sticking through the sole of the shoe. He wound up by saying that if the nail hadn't been found no doubt the doctors would have cut off the foot. They say that every knock is a boost, and yet medical men are getting a little tired of being maligned and misrepresented by a lot of squawkers of one kind or another who have selfish ends to serve, and we think the radio commission ought to prevent use of the radio to discredit any profession.

DR. CLARENCE TRUE WILSON, secretary of the Methodist Board of Temperance, Prohibition and Public Morals, has declared that Dr. Thayer, the president of the A. M. A., deserves severe criticism for a public address concerning the restrictions imposed by Congress upon the right of physicians to prescribe alcohol for medicinal purposes. Dr. Wilson publicly has declared, "Dragging the legal and political question of prohibition into an annual address before the American Medical Association is a questionable procedure, unpatriotic and out of taste." Of course, we believe that the public now is rather familiar with the spectacular and questionable methods pursued by Dr. Wilson in keeping himself in the limelight and unfairly if not dishonestly presenting the prohibition question to the public. When a man garbles, distorts, and misrepresents, as Dr. Wilson did publicly during the Portland session of the A. M. A., there are not many who are going to pay serious attention to his vicious attacks upon his superiors in culture, patriotism and common honesty.

RECENTLY there seems to have been an awakening to the fact that we are threatened by a real menace in the form of state medicine, and the profession is anxious to do something to stem the tide. Perhaps the awakening is too late, but if anything is to be accomplished in warding off

the fate that threatens then it will have to come by concerted action, and especially through more militant effort on the part of the American Medical Association, the great parent medical body of the United States. Paternal or socialistic medicine never will prove a success, but some seem to think that the best way to test out the matter is to try it, and even some of the leaders in the medical profession, mostly those occupying good positions in government or teaching institutions, are frankly sympathetic. We sincerely hope that some definite action will be taken in an effort not only to unify the entire profession in its opinion concerning socialized medicine, but that the machinery will be started to thwart the efforts now being put forth to saddle state medicine upon us.

WE hope that every fellow of the American Medical Association has read the article on the cost of medical care and the trend of medicine, by M. L. Harris, of Chicago, president of the A. M. A., as it appeared in the November number of the *American Medical Association Bulletin*. The article very clearly points out the dangers that threaten the medical profession and public alike by some of the present tendencies toward socialistic or lay controlled medical practice if permitted to continue and broaden its scope without interference. Dr. Harris points out in a very lucid and analytical way the dangers that threaten our independence and winds up by advocating the organization of medical centers, owned and managed by the profession, so that all those who are unable to pay regular fees to the physician may receive the highest class of medical service at a cost that is adjusted to their ability to pay. This will require the profession to exercise a degree of business ability that thus far has been foreign to it but which it is perfectly capable of doing.

COMMERCIAL interests, and particularly the representatives of proprietary medicine manufacturers, controlled the recent United States pharmacopeial convention. Representatives from the medical profession and other scientific bodies having a real interest in making the United States pharmacopeia a book of trustworthy reference were ignored or voted down upon important questions. As a direct result the work of the convention is of little value, and certainly the medical profession is not going to place its stamp of approval upon books that approve proprietary remedies possessing little or no merit and exploited without regard to truth. It looks as though the American Medical Association will be obliged to be responsible for a book of pharmaceutical standards to be used by reputable physicians as well as reputable druggists. At the present time reputable medical men will do well if they confine prescribing to the book called *Useful Drugs*, including products selected by the Council on Pharmacy and Chemistry of the American Medical

Association from the Pharmacopeia and New and Nonofficial Remedies.

It is a quirk of human nature that prompts an industrial concern or an insurance company to object to fair compensation to physicians for services rendered, but offer no objections to bills rendered by attorneys. In both instances the services are professional, and in this day of commercialism if the services of both the lawyer and the physician are to be placed upon a dollar-and-cent basis when covering actual dollars and cents involved, then the services of the physician are on a par with those of the attorney. We are reminded of this through a recent experience, cited by one of our members. An insurance company employed an attorney to look out for their interests in a compensation case. The only thing the attorney did was to secure a complete examination by a qualified physician, and upon the results of that examination the attorney recommended the payment of the claim, which happened to be for a few hundred dollars only. The attorney had no difficulty in obtaining fifty dollars for his services, but the physician's fee of fifteen dollars for examination and written opinion concerning the same was objected to by the insurance company, though eventually paid.

A NEW YORK importer who tried to corner the market on ergot has been making some vicious and unfounded statements concerning the purity and efficacy of various ergot preparations now found on the market. He even went so far as to carry his contention to the courts in his endeavor to get the United States government to place its stamp of disapproval on practically everything that did not pass through his hands, and was defeated. In commenting on this ergot controversy, the *Journal of the A. M. A.*, May 10, 1930, says that "there is no real reason why the American physicians should not continue to use with confidence fluidextracts made by reputable firms in accordance with the pharmacopeial method and shown by proper methods of assay to contain the activity required by the pharmacopeial standard. If he uses other than official preparations he should convince himself that the nonofficial preparation used actually possesses the properties characteristic of a standard ergot preparation. If it has been accepted by the Council on Pharmacy and Chemistry for New and Nonofficial Remedies the composition and efficiency may be depended upon."

DR. JOHN R. BRINKLEY, the rejuvenating quack of Selfridge, Kansas, is said to own a broadcasting station used extensively in exploiting his rejuvenating business, including the sale of proprietary remedies sold by number through a string of Brinkley drug stores located throughout the Middle West. On complaint of the American

Medical Association the Radio Commission cut Brinkley off the air on the ground that his exploitation was detrimental to public interests. However, Brinkley seems to have had some sort of a pull, for his broadcasting license has been reinstated and from now on we may expect more and worse rejuvenating buncombe over the radio than we had before, and along with it there certainly will be abuse of the regular medical profession. There are a lot of worn-out human goats who regularly bite at the rejuvenating bait, just as there are a lot of homely old maids who will fall for advertising entitled "How to Be Beautiful." Sometimes you can improve upon the Creator's work through the surgical correction of a deformity, but homely old maids and sexually worn-out old men are not in that class, though it is said Brinkley has made a fortune out of the latter, and no doubt he would make it bigger and quicker if he included the former in his quackery.

MANY reputable physicians continue to patronize and otherwise aid some of the most objectionable commercial medical journals which patently will sell their pages to practically any enterprise, good, bad or indifferent, for a price. Without the support of the medical profession such journals could not exist, and why they receive any support is beyond our comprehension. Thus a medical journal which we know circulates freely though perhaps gratuitously among Indiana physicians has forty-three pages of the rottenest kind of medical advertising in one of its recent numbers, and in all of that advertising there isn't one of the better class of medical advertisers, and yet we know there are some Indiana physicians who have contributed to the pages of that journal even though for the most part the contents of that journal are made up of abstracts. It might be interesting to know just how many paid subscriptions can be credited to such a journal, and whether the advertisers pay for the advertising on the basis of a bona fide subscription list. As a mere side issue, it might be interesting to know just how such journals manage to get around mail privileges which require bona fide subscription lists in order to secure second-class rates at the hands of the post office department. However, our criticism is that physicians ought to withhold their support from such rankly commercial magazines or journals.

ALL medical, surgical, dental, hospital, nursing and laboratory service at six cents per day, if you take a contract offered by a company that is running full-page advertising in the Fort Wayne newspapers. The claim is made that the company pays all charges, but the question well may be raised, how much does it pay, and what physicians and surgeons will be interested in this new devel-

opment that, if we are not mistaken, is destined to place a low estimate upon values pertaining to medical and surgical service. Will members of the medical profession accept the fees fixed by such a company and abide by the restrictive rules that no doubt will prevail eventually if not in the beginning? Someone may say, "Don't cry until you are hurt," but there is a well-authenticated rumor to the effect that the lay incorporators of the new enterprise have said that, figuratively speaking, the medical profession will eat out of the hands of the company and be very glad to accept whatever the company decides to pay for professional services. There is an old saying that you can lead a horse to water but you can't make him drink, and perhaps the enterprise under discussion expects to prove the fallacy of that old saying and force physicians and surgeons to "drink." Will the medical profession submit to the imposition and dictation that seems to be rising on the horizon, or will they stand unitedly for the recognition they deserve?

THE House of Delegates of the A. M. A., at the Detroit session, had an executive session to discuss the prohibition question once more. To our notion the American Medical Association, as a strictly scientific body, should not discuss the question of alcohol prescribing or indulging from the standpoint of temperance. We think it is the rank-est kind of oppression to tell medical men what and what not they shall prescribe for the relief of illness, but in reality absolute prohibition of alcohol as a medicine or a beverage if uniform throughout all the states will do no particular harm, and here in Indiana where we have the "bone dry law," which does not permit physicians to prescribe even a teaspoonful of alcohol, we get along very well, and the same is true in some other dry states, so why should the physicians of New York put up such a squawk because they are permitted to prescribe only a limited quantity of whiskey for their patients and that quantity also limited to a certain number of days? We admit being "wet" personally, and would wipe the eighteenth amendment from the statute books tomorrow if we could do so, for we realize that the law never was and never can be enforced successfully and it has been detrimental to social, moral and economic progress, but the great American Medical Association, as a scientific body, ought to confine itself to the scientific aspects of alcohol consumption and not to the personal feelings of some of the members who may or may not be in favor of the present prohibition act.

It is all right for a committee largely composed of laymen to study the cost of medical care, but isn't it time for the medical profession to study the economic phases pertaining to the practice of medicine and recommend for general adoption by the profession some plan whereby medical men

will receive their just desserts in award for services rendered? At the present time the medical profession is the "goat" for a lot of uplift work in the interest of the dear public, and in its execution is called on without rhyme or reason and with ultimate harm to the very class of people which the work is supposed to benefit. The matter of furnishing adequate and competent medical and surgical service to all the people all the time is a project that can be handled by the medical profession itself without outside interference if due consideration is given the subject. This can be done without pauperizing anyone or aiding in the increase of dependency, and it can be done without the rank imposition upon the medical profession that now prevails. Furthermore, it can be carried on without the ill-advised and ill-considered methods proposed by some of our philanthropists who with honest intentions are attempting to give proper attention to the indigent and poor but without using appropriate discrimination in the distribution of favors. The backbone of all of the medical charity is the service of the medical man, and he and he alone should be the judge as to the manner of distribution of free or near-free service tendered by him. He ever has and ever will be charitable, but at present his generosity is abused shamefully and his economic standing in the community is threatened. If he loses out in this fight for a place in the sun he has no one to blame but himself.

RECENTLY some of the medical journals have been running scare-heads concerning the growing menace of socialized medicine, and particular attention is called to the possibility of socializing many other things if socialized medicine becomes a reality. The theory is not unfounded, as some established conditions will indicate. We do know that already the medical profession is in a sense throttled by the dictations of insurance companies, industrial concerns, and compensation boards. There is a growing tendency to throw all kinds of medical and surgical services into a hopper and grind it up into parcels that are dealt out on a department store basis at bargain prices, irrespective of quality of service. In some quarters we hear a great hue and cry voiced in more than one lay periodical of large circulation to the effect that the cost of all medical and surgical service is too high, but not one word is said concerning the return for investment, time, and skill put into the practice of medicine by those who follow the profession. Little is said about the high cost of legal services, and no criticism is offered concerning the extravagance of the average American citizen who if he used any judgment in his expenditures would have ample funds to pay for medical and surgical services at prevailing rates. We have been accused of being alarmists concerning the growing tendency of the public to accept paternalistic or socialistic medicine, but we fail

to understand how anyone who carefully analyzes the subject can fail to see the dangerous position we occupy at the present moment as regards the economic position to be occupied by medical men within the next few years unless something is done to stem the tide of socialistic tendencies that are growing so rapidly and so effectively. The solution of the problem rests with the medical profession, which if it acts as an undivided organization, fighting as a unit for its economic position in the world, will accomplish something. Up to the present time we have been inclined to act individually in our reaction to economic questions, and we have been altogether too devout and conscientious in our worship of an old fetish concerning the impropriety of looking upon the practice of medicine as a business. It is not necessary to lose identity as worthy and respected members of a great profession, but it is necessary to take some decided action toward maintaining our own economic independence, and if we do not take some such action then we are doomed to see the members of our profession sink to the level of white-collared clerks or salaried employees. It is no extravagant statement to say that within ten years we are going to have the equivalent of paternalistic or socialistic medicine, and with it a decided lowering of the present economic position of the members of the American medical profession in general unless some concerted action is taken to stem the advance of this growing evil.

EVIDENTLY the Income Guarantee Company, of South Bend, Indiana, is not very favorable to physicians if we interpret broadly a letter sent to the Michigan State Medical Society concerning fees for professional services. From the letter, as printed in *The Journal of the Michigan State Medical Society*, we quote the aforementioned company as follows: "We cannot agree that the responsibility for the payment of a fee to the physician for preparing insurance reports rests with the insurance company, and we do not seem to be prepared to enter into any agreement to the effect that our company will pay such a fee. It seems rather inconsistent to the writer to read of the physicians in one state getting together and writing a story of being underpaid professionally, while the physicians in another state seem to be working toward the plan of lowering the physician's charges, seemingly admitting that bills and fees for medical and surgical attention have been and are generally too high." This letter is signed by the president of the company.

Naturally we question the assertion that the physicians of any state are getting together on any plan for lowering the physicians' charges which already are generally too low, and we are inclined to believe that the gentleman, who apparently is not very favorable toward the medical profession, is expressing his own narrow-minded

ideas concerning professional fees.

The Hoosier Casualty Company, of Indianapolis, through its president, is opposed to paying for all medical service in connection with risks assumed by the company, and the Lafayette Life Insurance Company, of Lafayette, Indiana, has a tendency to hedge on the question and thinks a plan should be adopted whereby the state medical societies should endorse examiners in order to be sure of better service.

The truth of the matter is that practically all life, health and accident insurance companies, except the "old line" companies, hedge when it comes to paying physicians decent fees for services that are directly of advantage to the companies themselves. Many of them insist that the policyholder should pay all of the expense of furnishing any medical evidence bearing upon the issuance of or the payment of indemnity under a life, health or accident policy. Coming down to brass tacks, isn't it consistent and fair for the company to determine the fitness of applicants who apply for policies, or the fairness of a claim for indemnity, and wouldn't the companies be safer in securing that evidence themselves than in having it procured and paid for by the applicant? We have learned through much experience to look upon the smaller companies, and in particular the assessment companies, as being the ones that usually "trim" the policyholder and the examining physician more than any other companies. However, if you want anything good you must pay for it, so if one carries a policy in a company that is fair in its dealings with everyone, and makes no effort to squeeze its policyholders or others on a technicality, the cost is a little greater than it would be in many of the smaller and less well-established companies that boast of low rates but resort to every means of avoiding responsibility. Some of the smaller insurance and compensation companies, most of them of the assessment type, we wouldn't trust as far as you can throw a bull by the tail, and under no circumstances would we feel like recommending them as being thoroughly trustworthy. This opinion is based upon a long experience in filling out blanks for disability, and discovering how often these compensation companies will crawl out of a just payment by falling back upon a technicality. The older, better established and more responsible companies do not resort to technicalities as a general thing.

THE following Indiana physicians registered at the Detroit session of the American Medical Association:

Monday, June 23:

R. D. Bayley, Lafayette; Eugene F. Boggs, Indianapolis; Louis A. Bolling, South Bend; R. M. Bolman, Fort Wayne; Albert E. Bulson, Fort Wayne; J. T. Carney, Batesville; Ralph S. Chappell, Indianapolis; R. E. Cole, Muncie; Harvey S. Cook, Valparaiso; Chas. C. Crampton, Delphi; Frank W. Cregor, Indianapolis; F. S. Crockett,

Lafayette; F. W. Dunn, Muncie; Robert M. Dearmin, Indianapolis; B. W. Egan, Logansport; Harry Elliott, Brazil; Charles H. Emery, Bedford; Millard H. Foster, Zionsville; Chas. E. Gillespie, Seymour; Alfred S. Giordano, South Bend; Wallace S. Grayston, Huntington; James A. Greene, Indianapolis; H. C. Groman, Hammond; E. O. Harrold, Marion; W. F. Hughes, Indianapolis; Frank S. Kitson, Manchester; Hedwig S. Kuhn, Hammond; Hugh A. Kuhn, Hammond; Bernard J. Larkin, Indianapolis; Marcus Ward Lyon, Jr., South Bend; H. H. Martin, LaPorte; Jeremiah A. McCarthy, Whiting; S. E. Mentzer, Monroeville; Arvine E. Mazingo, Indianapolis; Otis B. Nesbit, Gary; Hope H. Nicholson, Bilaspur; H. C. Parker, Gary; Wallace T. Partch, Evansville; Lyman R. Pearson, Indianapolis; Chas. A. Pfafflin, Indianapolis; Nettie B. Powell, Marion; Charles J. Rothschild, Fort Wayne; David Ross, Indianapolis; W. D. Schwartz, Portland; Ada E. Schweitzer, Indianapolis; G. D. Scott, Sullivan; Albert E. Sterne, Indianapolis; Dorothy D. Teal, Indianapolis; W. M. Veazey, Avilla; William Wise, Indianapolis.

Tuesday, June 24:

Harold H. Ash, Lafayette; G. B. M. Bower, Fort Wayne; Frank W. Black, Ligonier; John C. Blossom, Richmond; Chas. L. Cabalzer, Indianapolis; J. R. Carney, Delphi; John W. Deyton, Martinsville; F. M. Dukes, Dugger; E. W. Dyar, Ossian; H. E. Glock, Fort Wayne; G. G. Greene, Gary; Frank E. Hill, Muncie; Marian Hochhalter, Logansport; J. E. Hughes, Indianapolis; Carroll C. Hyde, South Bend; G. B. Jackson, Indianapolis; F. G. Keller, Alexandria; Frank H. Kelly, Argos; Alva M. Kirkpatrick, Columbus; Nicholas A. Kremer, Madison; Helen P. Langner, Indianapolis; John M. Lochhead, Indianapolis; George F. Lawler, Indianapolis; R. B. McKeeman, Fort Wayne; Robert A. Milliken, Indianapolis; Robert M. Moore, Indianapolis; Harvey L. Murdock, Fort Wayne; A. H. Northrup, Markle; Karl R. Ruddell, Indianapolis; Louis H. Segar, Indianapolis; R. P. Schuler, Kokomo; Harmon L. Stanton, Evansville; Henry G. Steinmetz, Logansport; P. N. Sutherland, Angola; C. M. Stoycoff, Gary; B. J. Terrell, Indianapolis; Harold M. Trusler, Indianapolis; H. A. VanOsdol, Indianapolis; Metodi Velkoff, Fort Wayne; H. A. Vore, East Chicago; Matthew Winters, Indianapolis; Fred B. Wishard, Anderson; Homer Woolery, Bloomington; Perry Woolery, Bedford; J. William Wright, Indianapolis; R. H. Young, Goshen; A. L. Ziliak, Princeton.

Wednesday, June 25:

Charles L. Aker, Mooresville; Kenneth D. Ayers, Anderson; Clarence S. Baker, Evansville; Max A. Bohn, Indianapolis; Norman M. Beatty, Indianapolis; Raymond C. Beeler, Indianapolis; P. J. Birmingham, South Bend; R. A. Bowman, Elkhart; Fred Braginton, Hammond; David A. Bickel, South Bend; Harold Stitzel Brubaker,

Huntington; O. G. Brubaker, North Manchester; U. L. Bruetsch, Indianapolis; Doster Buckner, Fort Wayne; D. F. Cameron, Fort Wayne; Emor L. Cartwright, Fort Wayne; Harold D. Caylor, Bluffton; W. B. Christophel, Mishawaka; C. P. Clark, Indianapolis; William F. Clevenger, Indianapolis; J. A. Craig, Gary; J. Carlton Daniel, Indianapolis; C. H. DeWitt, Valparaiso; Werner W. Duemling, Fort Wayne; Karl C. Eberly, Fort Wayne; H. W. Eby, Goshen; B. M. Edlavitch, Fort Wayne; Bert E. Ellis, Indianapolis; Edward E. Evans, Gary; Frank B. Fisk, Indianapolis; J. C. Fleming, Elkhart; L. S. Trybargh, Bristol; G. J. Geisler, South Bend; Frank M. Gastineau, Indianapolis; C. H. Gibson, Elkhart; J. H. Gilpin, Fort Wayne; Thomas A. Hendricks, Indianapolis; W. F. Johnston, Richmond; H. H. Kamman, Columbus; Thomas Donald Keckich, Gary; Edwin N. Kime, Indianapolis; G. O. Larson, LaPorte; A. F. Lenzen, Gary; E. O. Lindenmuth, Indianapolis; T. J. Marshall, Charlestown; Robert J. Masters, Indianapolis; J. E. McMeel, South Bend; S. T. Miller, Elkhart; H. F. Mitchell, South Bend; Raymond E. Mitchell, Indianapolis; I. E. Morris, Fort Wayne; Cassell Alexander Mott, South Bend; Cleon A. Nafe, Indianapolis; H. L. Norris, Indianapolis; Emil Novak, Ballmon; Harold Nugen, Auburn; Carrol O'Rourke, Fort Wayne; Guy A. Owsley, Thorntown; Manley A. Page, Lowell; Thos. B. Pauszek, South Bend; J. E. Rarick, Wolcottville; B. W. Rhamy, Fort Wayne; Floyd Riggs, Terre Haute; Eden T. Kiley, Greensburg; Floyd T. Romberger, Lafayette; Philip Jack Rosenbloom, Gary; N. L. Salon, Fort Wayne; Claude A. Savage, Fort Wayne; Donald W. Schafer, Fort Wayne; Herbert M. Senseny, Fort Wayne; Cecil M. Sennett, South Bend; Joseph Chester Silvers, Muncie; Morrell Simpson, Bedford; Herbert N. Smith, Brookville; Lester A. Smith, Indianapolis; J. A. Snapp, Goshen; Chas. R. Sowder, Indianapolis; A. Jerome Sparks, Fort Wayne; Raymond Wm. Spenner, South Bend; Orville E. Spurgeon, Muncie; Joseph H. Stamper, Middletown; Chester A. Stayton, Indianapolis; Chas. S. Stewart, Auburn; A. E. Stinson, Athens; W. K. Templeton, Garrett; Melvin S. Teters, Middlebury; Frank Wade, Howe; H. L. Walker, Cedar Rapids; Arthur J. Whallon, Richmond; Wm. Niles Wishard, Jr., Indianapolis; Noah Zehr, Fort Wayne.

Thursday, June 26:

W. T. Bennie, Terre Haute; E. R. Carlo, Fort Wayne; G. N. Denley, Kokomo; S. S. Frazier, Angola; A. A. Huffman, South Bend; M. E. Klingler, Garrett; Edw. H. Kruse, Fort Wayne; M. M. Lairy, Lafayette; W. D. Little, Indianapolis; J. O. Ritchey, Indianapolis; Juan Rodriguez, Fort Wayne; Murray M. Sears, Elkhart; John T. Short, Fort Wayne; Elmer C. Singer, Fort Wayne; J. E. Showalter, Waterloo; David H. Sluse, Indianapolis; C. F. Voyles, Indianapolis;

Wm. N. Wishard, Indianapolis; Justice F. Wynn, Evansville.

MEDICO-LEGAL DEPARTMENT

BY ALBERT STUMP

ATTORNEY FOR

INDIANA STATE MEDICAL ASSOCIATION

Question: What is the law in regard to the liability of hospitals to their patients for negligence in their treatment?

Answer: It is a general rule that those who furnish hospital accommodations and medical attendance, not for the purpose of making a profit thereby but out of charity, are not liable for the negligent acts of the physicians, nurses, attendants, or other persons in their employment or service. The hospital would be liable only for want of ordinary care in selecting physicians, nurses or other persons.

Where the hospital is operated as a municipal or public hospital there would be no liability for the reason that such hospital would be regarded either as a charitable institution, in which case the city would not be liable, or as an instrumentality through which it exercised its police powers, in which case likewise the city would not be liable. (Scott vs. City of Indianapolis, 130 N. E. 658.)

The rule and the reasons for it are stated in an opinion in Schloendorff vs. New York Hospital Society, 211 N. Y. 125; 105 N. E. 92, which was a case where the hospital was held not liable for the act of a surgeon in performing an operation without the consent of the patient. The court said:

"Certain principles of law governing the rights and duties of hospitals when maintained as charitable institutions have, after much discussion, become no longer doubtful. It is the settled rule that such a hospital is not liable for the negligence of its physicians and nurses in the treatment of patients. * * * This exemption has been placed upon two grounds. The first is that of implied waiver. It is said that one who accepts the benefit of a charity enters into a relation which exempts one's benefactor from liability for the negligence of his servants in administering the charity. * * * The second ground of exemption is the relation subsisting between a hospital and the physicians who serve it. It is said that this relation is not one of master and servant, but that the physician occupies the position, so to speak, of an independent contractor, following a separate calling, liable, of course, for his own wrongs to the patient whom he undertakes to serve, but involving the hospital in no liability if due care has been taken in his selection. On one or the other, and often on both of these grounds, a hospital has been held immune from liability to patients for the malpractice of its physicians. * * * In the case at hand, the wrong complained of is not merely negligence. It is trespass. Every human being of adult years and sound mind has a right to determine what shall be done with his own body; and a surgeon who performs an operation without his patient's consent commits an assault for which he is liable in damages. This is true except in cases of emergency where the patient is unconscious and where it is necessary to operate before consent can be obtained. The fact that the wrong complained of here is trespass rather than negligence distinguishes this case from most of the cases that have preceded it. In such circumstances the hospital's exemption from liability hardly can rest upon implied waiver. Relatively to this transaction, the plaintiff was a stranger.

She had never consented to become a patient for any purpose other than an examination under ether. She had never waived the right to recover damages for any wrong resulting from this operation, for she had forbidden the operation. In this situation, the true ground for the defendant's exemption from liability is that the relation between a hospital and its physicians is not that of master and servant. The hospital does not undertake to act through them, but merely to procure them to act upon their own responsibility. * * * A ruling would, indeed, be an unfortunate one that might constrain charitable institutions, as a measure of self-protection, to limit their activities. A hospital opens its doors without discrimination to all who seek its aid. It gathers in its wards a company of skilled physicians and trained nurses, and places their services at the call of the afflicted, without scrutiny of the character or the worth of those who appeal to it, looking at nothing and caring for nothing beyond the fact of their affliction. In this beneficent work it does not subject itself to liability for damages though the ministers of healing whom it has selected have proved unfaithful to their trust."

DEATH NOTES

JOHN F. TAYLOR, M.D., of St. Paul, Indiana, died May 29th, aged eighty-five years. Doctor Taylor had retired from the active practice of medicine. He was graduated from the Medical College of Ohio, Cincinnati, in 1879.

J. S. CRITCHFIELD, M.D., of Princeton, died June 6th, aged seventy-three years. Doctor Critchfield had practiced medicine in Princeton for thirty years. He was graduated from the Indiana Eclectic Medical College, Indianapolis, in 1887.

W. W. SALISBURY, M.D., of Hanna, was killed instantly June 4th when the automobile he was driving was struck by a train. Doctor Salisbury was seventy years of age. He was graduated from the Bennett Medical College, Chicago, in 1877.

GEORGE E. BAKER, M.D., of Odell, died May 29th, aged forty-six years. Doctor Baker was a member of the Fountain-Warren County Medical Society, the Indiana State Medical Association and the American Medical Association. He was graduated from the University of Louisville School of Medicine in 1913.

JAMES C. CARVER, M.D., of Hammond, died May 22nd, aged thirty years. Doctor Carver was a member of the Lake County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He was graduated from Harvard University Medical School, Boston, in 1925.

ERNEST R. SISSON, M.D., of Greenfield, died May 26th, aged sixty years. Doctor Sisson was a member of the Hancock County Medical Society, the Indiana State Medical Association and the American Medical Association. He was graduated from the Medical College of Indiana, Indianapolis, in 1898.

ELMER U. POWELL, M.D., of Greentown, died May 19th, aged sixty-eight years. Doctor Powell

was a member of the Howard County Medical Society, the Indiana State Medical Association and the American Medical Association. He was graduated from the Fort Wayne College of Medicine in 1884.

EDWARD B. LONG, M.D., of Evansville, chief surgeon at St. Mary's Hospital in that city, died May 22nd, aged fifty-four years. Doctor Long was a member of the Vanderburgh County Medical Association, the Indiana State Medical Association, and a Fellow of the American Medical Association. He was graduated from the Louisville Medical College in 1903.

ROY V. HANNELL, M.D., of Lafayette, aged fifty-two years, died May 23rd. Doctor Hannell had practiced medicine in Tippecanoe county for twenty-five years. He was a member of the Tippecanoe County Medical Society, the Indiana State Medical Association and the American Medical Association. He was graduated from the Medical College of Indiana, Indianapolis, in 1903.

CARL S. OAKMAN, M.D., of Muncie, died June 19th following an operation at the University Hospital at Ann Arbor, Michigan. Doctor Oakman was fifty-four years of age. He was graduated from Harvard Medical School in 1903 and studied roentgenology at the University of Michigan. He was a member of the Muncie Academy of Medicine, the Indiana State Medical Association, a Fellow of the American Medical Association, a member of the Radiological Society of North America and was president of the Indiana Roentgen Society.

NEWS NOTES AND PERSONALS

THE Elkhart County Medical Society held its annual picnic meeting at Christiana Lake, June 5th.

It has been reported that thirty cases of typhoid developed in Cicero as a result of an infected milk supply.

DR. CHARLES E. FERGUSON, retired physician of Indianapolis, was honored at a meeting of the Indianapolis Medical Society, May 27th.

DR. H. V. SCARBOROUGH, of Iowa City, Iowa, has been appointed superintendent of the Marion County Tuberculosis Hospital at Sunnyside.

DR. D. C. McCLELLAND, of Lafayette, presented a paper on "Treatment of Uterine Hemorrhage" before the Tippecanoe County Medical Society at Lafayette, June 12th.

THE Fountain-Warren County Medical Society held a meeting in Covington, June 6th. The mem-

bers enjoyed a catfish dinner in addition to the regular program.

THE Jay County Medical Society held a meeting at Portland Country Club, June 6th. Dr. Allen A. C. Nickel, of the Mayo Clinic, presented an illustrated lecture on "Focal Infection."

THE Boone County Medical Society held its regular meeting June 3rd. Dr. James T. Stygall, of Indianapolis, presented an illustrated lecture, his subject being "Methods of Treatment of Tuberculosis."

DR. W. L. THOMPSON, of Mooresville, Indiana, was painfully but not seriously injured in an automobile accident near Indianapolis, May 1st. After a week in the Methodist Hospital, he returned to his home.

SUMMER clinics sponsored by the Chicago Medical Society will be held at the Cook County Hospital, August 11th to 22nd, inclusive. Complete information may be obtained from the office of the Chicago Medical Society, 185 North Wabash Avenue, Chicago.

DR. CHARLES J. ROTHSCHILD was made president of the Allen County Medical Society, Dr. Herbert M. Senseny vice-president, Dr. L. P. Harshman re-elected secretary, and Dr. L. S. McKeeman re-elected treasurer at the annual business meeting held June 3rd.

DR. A. M. MENDENHALL, of Indiana University School of Medicine, addressed the Kalamazoo Medical Society at Kalamazoo, Michigan, May 19th, the Richmond Medical Society, Richmond, Indiana, May 29th, and the Fountain-Warren County Medical Society at Covington, June 5th.

DR. JAMES GREEN, of the University of Michigan, will be associated with Dr. L. G. Zervas, of the research department, Indianapolis City Hospital. Dr. William A. Doeppers, superintendent of the hospital, has said that the addition of Doctor Green to the department indicated an enlargement of the department under the continuing cooperation of Eli Lilly & Company.

A POSTGRADUATE week of physical therapy will be held in conjunction with the ninth annual session of the American Congress of Physical Therapy, to be conducted September 8th to 12th, inclusive, 1930, at the New Hotel Jefferson, St. Louis, Missouri. New features in the conduct of clinics and demonstrations will be observed. Full information and details may be obtained by writing to the executive secretary, American Congress of Physical Therapy, Suite 716, 30 North Michigan Avenue, Chicago.

THE United States Civil Service Commission announces open competitive examination for associate bacteriologist (medical) applications for which position must be on file with the Civil Service Commission at Washington, D. C., not later than July 30, 1930. The examination is to fill a vacancy in the position of clinical laboratorian, U. S. Veterans' Bureau Hospital, Palo Alto, California, and vacancies occurring in positions requiring similar qualifications throughout the United States. The entrance salaries range from \$3,200 to \$3,700 a year. Full information may be obtained from the United States Civil Service Commission at Washington, D. C.

THE Fourth District Medical Society held its twenty-sixth annual session at North Vernon, May 14th. Papers were presented by Dr. W. D. Weaver, Greensburg; Dr. O. G. Salb, Seymour; Dr. Bine Whitlatch, Milan; Dr. A. G. W. Childs, Madison; Dr. Frank W. Cregor, Indianapolis; and Dr. M. C. McKain, Columbus. Dr. A. C. McDonald, president of the Indiana State Medical Association, was present and gave a short talk. A banquet was held in the evening, with thirty doctors and their wives attending. Dr. William F. King, secretary of the State Board of Health, was the guest speaker. The ladies were entertained at the Muscatatuck Country Club during the day. Madison, Indiana, was selected as the meeting place for 1931, Dr. N. A. Kremer, of Madison, was elected president, and Dr. O. A. Turner, of Madison, secretary-treasurer for 1931.

IN addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Eli Lilly & Co.:

Ampoules Glucose (Dextrose, U. S. P. O Lilly 50 Gm., 100 cc.

Parke, Davis & Co.:

Parke, Davis & Company's Cod Liver Oil with Viosterol 5 D.

Sandoz Chemical Works, Inc.:

Scillarren:

Tablets Scillaren.

Solution Scillaren.

Scillaren-B:

Ampules Scillaren-B.

INDIANA UNIVERSITY NEWS NOTES

DR. CHARLES P. EMERSON, dean of the Indiana University Medical School at Indianapolis, spoke before the fourth annual June breakfast of the Riley Hospital Cheer Guild in the Riley room of the Claypool Hotel at Indianapolis.

ELECTION to Alpha Omega Alpha is one of the most coveted honors of medical school students, as only those who have the highest of scholastic aver-

ages are chosen for membership. It is one of the oldest honorary organizations on the campus.

THETA KAPPA PSI, national medical fraternity, gave a banquet Thursday, May 15th, in the Hunters' Lodge of the Marott Hotel at Indianapolis in honor of the members of the fraternity who were graduated in June from the Indiana University School of Medicine. More than forty doctors were present. Dr. E. W. Williams was toastmaster and Drs. R. S. Sappenfield and Fred Clark headed the committees in charge of arrangements.

THE following Indiana University students who were graduated in chemistry this June have been admitted to schools of medicine: Benjamin Cohen, Indiana Harbor, University of Chicago; Edmund Keeney, Shelbyville, Johns Hopkins University; Halli I. Morgan, Knightstown; Margaret Nice, Richmond; Charles E. Holland and Constance Earle, Bloomington, Indiana University.

NEXT year's officers of the Indiana University School of Medicine chapter of Phi Chi, national medical fraternity, were installed May 20th at the annual spring meeting of the fraternity in the Spink-Arms Hotel. Sixty active and alumni members attended. Dr. A. Hollingsworth was the principal speaker. Officers installed were: Arthur B. Richter, presiding senior; Howard C. Coggs, presiding junior; Myron L. Habbeger, treasurer; Ralph Shaner, secretary; Farrell Dragoo, judge advocate; and Carl Parker, master of ceremonies.

THE winner of the Ravdin medal at Indiana University this year was Dr. Lucian Allen Stamper, of Springport. This medal is given by Dr. M. Ravdin, of Evansville, to the member of the senior class of the Indiana University School of Medicine who makes the highest average in the four-year course for the M.D. degree. Doctor Stamper received the B.S. degree from Indiana University in 1928 and the M.D. degree with the commencement class this year. He received the A.B. degree from Earlham College in 1927 and is a member of the Alpha Omega Alpha honorary scholastic medical fraternity.

AT the recent commencement exercises of Indiana University 105 students were awarded the doctor of medicine degree, 22 the doctor of dental surgery degree, 22 the graduate nurse degree, and 47 the bachelor of science degree in medicine. Of the 105 students receiving the doctor of medicine degree, three were awarded this degree *cum laude*. They were Dr. George R. Dillinger, of French Lick; Dr. John H. Greist, Indianapolis, and Dr. Jack E. Pilcher, Indianapolis. All three of these doctors received the M.D. degree in 1929. Doctor Dillinger wrote his thesis this year on "Rheumatic Infection, with a Discussion of the

Effect of Roentgen Ray Therapy in Rheumatic Carditis." The subject of Doctor Greist's thesis was "Diabetic Coma," giving a review of eighteen cases in the Robert W. Long Hospital, Indianapolis, from June 14, 1914, to June 1, 1929. Doctor Pilcher wrote on "Gangrenous Appendicitis."

THE following students of the Indiana University Medical School were elected this spring to the Alpha Omega Alpha Medical Scholarship Society: Cecil L. Andrews, Greenfield; James C. Brown, Burnettsville; Clyde G. Culbertson, Vevay; Lloyd E. Foltz, Indianapolis; Harry C. Harvey, Marion; Howard H. Honda, Peahi, Haiku, Hawaii; Ralph U. Leser, Bloomington; Clifton E. Merritt, Orland; Russell E. Miller, Rochester; Ben B. Raney, Linton; James W. Ravenscroft, Indianapolis; Harry J. Riemer, Cleveland, Ohio; Anthony F. Riofski, Nanticoke, Pennsylvania; John D. Rogers, Gosport; Joseph S. Skobba, Nanticoke, Pennsylvania; Lucian A. Stamper, Springport; Richard E. Stout, Bloomington; Morris C. Thomas, Indianapolis; Frances T. Brown, Indianapolis; Charles H. Denzler, Jeffersonville; Donald C. Emenhiser, New Haven; Frank Furstenberg, Indianapolis; Ardis Melloh, Indianapolis; Edward S. Post, South Bend; Arthur B. Richter, Flora; Ralph D. Shaner, Fort Wayne.

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

May 20, 1930.

Meeting called to order at 3:30 p. m.

Present: Wm. N. Wishard, M.D., chairman; James H. Stygall, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held May 6th read and approved.

The release, "Vacation and Typhoid Vaccination," corrected and approved for publication Saturday, May 31st.

Radio releases:

May 17—"Taking the Ax Out of Laxatives."

May 24—"Keep Your Eye on the Ball."

Letter received from the news editor of the *Journal of the American Medical Association* asking that programs of important medical meetings, giving the names of speakers, the exact titles of their papers or talks, and the place and date of meeting, be mailed to the American Medical Association. Request also is made in the letter for authentic lists of officers after election as well as information concerning the deaths of physicians. The Bureau suggested that this request from the American Medical Association headquarters be put before the officers of the State Association and the secretaries of the various county societies in the June secretaries' bulletin. The suggestion also was made that forms in regard to meetings be made out for the secretaries to fill in and return. Such forms should have the time and place of meeting, the title of papers and the names of speakers on the program, and a few inches for the listing of special features and comments. The secretary of the Publicity Bureau was instructed to prepare such a form and present it at the next meeting of the Publicity Committee.

Letter received from Muncie woman saying that a representative of the Academy of Nursing of Fort Wayne, who apparently is selling a correspondence nursing course, stated that his school was "backed by the Allen County

Medical Society and by the State Medical Association." The secretary was instructed to answer this letter and to send a copy of the letter from Muncie to the secretary of the Allen County Medical Society. The State Medical Association knows nothing about the Academy of Nursing of Fort Wayne.

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole May 27, 1930.

June 10, 1930.

Meeting called to order at 3:00 p. m.

Present: Wm. N. Wishard, M.D., chairman; A. C. McDonald, M.D., president of the State Association, and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held May 27th read, corrected and approved.

The release, "Safe and Sensible Swimming," approved for publication in Saturday morning papers, June 21st, and in other papers thereafter.

Radio releases:

June 7—"Poison Ivy."

June 14—"Safe and Sensible Swimming."

The following reports upon medical meetings were received:

May 21—Indiana Pharmaceutical Association, Lafayette, Indiana. "Physician and Druggist."

June 2—Johnson County Medical Society, Franklin, Indiana. "Better Business Methods."

June 3—Boone County Medical Society, Lebanon, Indiana. "The Diagnosis and Treatment of Pulmonary Tuberculosis."

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole June 17, 1930.

INDIANA STATE BOARD OF HEALTH DIVISION OF COMMUNICABLE DISEASES

MONTHLY REPORT, JUNE, 1930

Morbidity reports sent in by the Health Officers are widespread over the state. Ninety counties reported one or more cases of diseases. Two counties, Scott and Steuben, sent in negative reports for the four weeks of the month. There were 547 negative report cards sent in during the month.

The prevalence of diseases as indicated by the reports is shown below by the name and number of diseases from the urban and rural population as follows:

| Diseases | Total | Urban | Rural |
|------------------------|-------|-------|-------|
| Tuberculosis | 261 | 130 | 131 |
| Chickenpox | 179 | 143 | 36 |
| Measles | 530 | 430 | 100 |
| Scarlet Fever | 260 | 184 | 76 |
| Smallpox | 440 | 203 | 237 |
| Typhoid Fever | 28 | 2 | 26 |
| Whooping Cough | 148 | 86 | 62 |
| Diphtheria | 43 | 25 | 18 |
| Influenza | 26 | 0 | 26 |
| Pneumonia | 12 | 8 | 4 |
| Mumps | 11 | 9 | 2 |
| C. S. Meningitis | 14 | 9 | 5 |
| Undulant Fever | 4 | 1 | 3 |

A marked decline is noted in the number of cases of all diseases reported over the previous month, except typhoid fever. This is normal for the season.

Typhoid Fever. A sharp increase is noted. This is due to an outbreak of the disease at Cicero, when seventeen cases were reported. Twelve cases were reported the previous month. The same number of cases were reported in May of last year. The estimated expectancy was twenty-six cases. The estimated expectancy is based on the experience of the last seven years. Typhoid fever is more prevalent in the summer and autumn months than any other season of the year. This is the time for prophylaxis.

Measles was the most prevalent disease this month. A

marked decline is noted. Eight hundred cases were reported the previous month. The corresponding month the preceding year, 1,441 cases were reported. The disease will continue to decline through the summer months. It has been said measles goes in cycles; if so, we are at the beginning of a new cycle.

Scarlet Fever shows more than a fifty per cent decline over last month, when 594 cases were reported. Five hundred and sixty-four cases of the disease the same date last year. The normal average for June is 305 cases. Scarlet fever is a cold weather disease.

Smallpox. A sharp decline is noted. Six hundred and eighty-nine cases reported last month. Three hundred and twenty-two cases same date the preceding year. The estimated expectancy was 343 cases. Fifty-seven counties in the state reported cases. Those reporting the greatest number of cases are as follows: Howard, 80; Marion, 35; Gibson, 31; Spencer, 21; Dubois, 18; Vigo and LaGrange, 15 cases each, respectively.

Diphtheria. A marked decrease is noted, sixty cases the preceding month. Corresponding date the previous year fifty-eight cases were reported. The estimated expectancy was eighty-nine cases. The number of cases this month is the least number of cases reported for any one month for the last seven years.

Meningitis (Cerebro-Spinal). A substantial decline is noted. Thirty-four cases last month. There have been during the last seven months 416 cases of the disease reported. During the last seven years only thirty-seven cases were reported. The epidemic meningococcus type of the disease has prevailed for the last seven months, but now is declining to the normal trend of sporadic cases.

Undulant Fever. Four cases being reported. Six cases the previous month. These cases have been reported to the Division through the State and Rhamy Laboratories. The physicians are on the lookout for this disease, now more than formerly.

The name and number of diseases reported during the month not mentioned above are as follows: Tuberculosis, 261; Chickenpox, 179; Whooping Cough, 148; Influenza, 26; Pneumonia, 12; Mumps, 11 cases.

During the month the Director investigated an outbreak of typhoid fever at Cicero. A case history was taken of seventeen cases. The epidemic was milk-borne. The initial case was due, no doubt, to contact with a human carrier of long standing.

H. W. McKANE, M.D.,
Collaborating Epidemiologist,
U. S. P. H. Service,

FOURTH TRIENNIAL CONGRESS OF INTERNATIONAL UROLOGICAL SOCIETY, MADRID, SPAIN

The Fourth Triennial Congress of the International Urological Society was held in the Palace of the Senate, Madrid, April 7th to 12th, under the chairmanship of Dr. E. L. Keyes, of New York. Over 200 urologists from Great Britain, North and South America and various countries of Europe attended. The Congress was opened by King Alfonso XIII, who was attended by the Prime Minister.

The first question for discussion by the Congress was "Etiology and Treatment of Hydronephrosis." Formal papers on various phases of the topic were presented by Professor Legueu (Paris), Doctor Covisa (Madrid) and Doctor Lasio (Milan), and discussed by the members of the society.

The second question, "Urinary Antiseptics," was presented by Doctors Jaeggy (Lusanne) and Pulido (Madrid).

A third question, "Colon Bacillus Infections," was presented by Professor Oeconomos (Athens) and Doctor Perearnau (Barcelona).

These topics were discussed by a large number of members and were presented in Spanish, French, Italian and English.

Demonstrations were given as follows: Films of operations, Sir John Thompson-Walker (London); arterio-radiography of the kidney, Reynaldo dos Santos. The latter was received with considerable interest. The procedure consists of injecting a solution of sodium iodide, by insertion of the needle through the costo-vertebral space, into the aorta, which renders the blood vessels opaque to the x-rays. At brief intervals immediately afterwards x-rays are taken of the kidney region. The proponents of the procedure believe that much valuable information may be obtained which will aid in diagnosis and prognosis of renal conditions and in tumors and other conditions where there is change of circulation.

All the meetings were well attended and enthusiastic interest shown in the discussions.

In addition to the regular program the local urologists held morning clinics at the principal hospitals of Madrid. Intravenous pyelography by the use of uroselectan was featured prominently in the diagnosis of renal conditions. The cutting current for bloodless renal surgery was demonstrated in a number of operations upon the kidney, for stone, hydronephrosis and nephrectomy.

The social features of the meeting deserve some comment. In the first place the Congress was held under royal patronage and the sessions were in the Palace of the Senate. The king presided at the opening meeting. He seemed interested and listened attentively to the address of the president, Dr. E. L. Keyes, of New York. A reception at the Ritz Hotel was given to the visitors by the Spanish Urological Society on the evening of the first day. The Prime Minister gave a reception to the members of the Congress and their families at the Palace of the Senate the second evening. The official banquet was held at the Palace Hotel the third evening and was presided over by Doctor Keyes. On the fourth day an excursion to Toledo for the members and their families was arranged. A reception by the King and Queen to the members and their families at the royal palace on the evening of April 12th concluded the session.

The Society voted to meet in London in 1933. Sir John Thompson-Walker was elected president for the next Congress. Dr. E. L. Keyes, of New York, is permanent president of the Society and Doctor Pasteau, of Paris, is secretary-general. The election of a local president is equivalent to a chairman of Committee on Arrangements.

The American members attending the meeting were Dr. E. L. Keyes, New York; Dr. H. H. Young, Baltimore; Dr. N. P. Rathbun, Brooklyn; Dr. Edwin Beer, New York; Dr. E. G. Crabtree, Boston, and H. G. Hamer, Indianapolis.

H. G. HAMER.

TIPPECANOE COUNTY MEDICAL SOCIETY

May 8, 1930.

The Tippecanoe County Medical Society met in regular session at Lincoln Lodge. Fifty-one were present at the dinner.

A clinic was held at 3:00 p. m. at St. Elizabeth's Hospital. At this time Dr. A. R. Barnes, of the Mayo Clinic, presented two cases of heart disturbances: First, a case of hypertension with more or less coronary sclerosis; the second one was one of tachycardia in a girl eighteen years old (cause unknown). Doctor Barnes gave a very excellent method for classifying heart disturbances, basing them upon the cause as follows: Hypertension, sclerosis, rheumatic, luetic, and infectious. The clinic was attended by forty to fifty people.

Dinner was served at 6:45 consisting of a fried chicken dinner. Following the dinner President McCay called the meeting to order. The minutes of the April meeting were read and approved. Communications consisting of the application of Dr. A. M. Mayfield, of Montmorenci, being read the second time and being recommended by the censors for membership in our society, motion was made and carried unanimously that we suspend the constitution and by-laws of the society for the time being and elect by acclamation. Motion was made and carried

that Dr. A. M. Mayfield be elected to membership in our society by acclamation, this making seventy-seven members.

Nominations for a second delegate were: Dr. G. K. Throckmorton, by Doctor VanReed. Motion was made and carried that nominations be closed and that Doctor Throckmorton be elected delegate by acclamation. Nominations for alternate delegate resulted in the nomination of President McCay. Motion was made and carried that nominations be closed. Then Vice-president Ikens presiding, it was moved, seconded and carried that the secretary cast the ballot of the entire society for Doctor McCay as alternate delegate.

Announcements of future meetings were made.

Everyone was urged to be present at the Ninth Councilor's District meeting at Noblesville, May 15th.

Report of the State Meeting of County Secretaries at the A. M. A. Building in Chicago on April 13th was deferred to the June meeting.

The following bills were allowed:

| | |
|--|--------|
| Amy B. Byler, mimeographing letters..... | \$1.25 |
| Leon Howey, meals..... | 3.00 |
| Perry, the Printer, letterheads..... | 5.85 |

The president introduced Dr. A. R. Barnes, who presented the subject of "The Consideration of Coronary Occlusion and Myocardial Infarction." Everyone was interested in the address and some very good questions were asked and satisfactorily answered at the close. Visiting physicians were present from Frankfort, Monticello, Reynolds, Fowler, and Crawfordsville.

Motion to adjourn was carried.

J. C. BURKLE, M.D.,
Secretary.

BOONE COUNTY MEDICAL SOCIETY

May 12, 1930.

On the above date the Boone County Medical Society held its regular meeting in the consultation room of the Witham Hospital with Doctor Ball, the president, in charge of the meeting. Guests present were the members of the Board of Trustees of the Witham Hospital, Tom Hendricks, executive secretary, and Dr. E. Rodger Smith, of City Hospital, of Indianapolis.

Following the dinner, entertainment was furnished by Betty Jo Laffner. Doctor Ball then gave a report on the secretaries' meeting in Chicago. This report was supplemented by remarks from Tom Hendricks. The usual routine form of business was dispensed with in order to give more time to the speaker of the evening, Dr. E. R. Smith. Doctor Smith gave a very interesting and most complete talk on "Cerebro-spinal Meningitis." Discussion by all members followed. A number of suggestions were given to the program committee for the next meeting. Motion for adjournment was made and passed.

June 3, 1930.

On the above date the Boone County Medical Society held its regular meeting in the consultation room of the Witham Hospital with Doctor Ball, president, in charge of the meeting.

Following the dinner a short business session was held at which time it was decided to take definite action in regard to physical examinations of children of pre-school age and of children already enrolled in the schools. A committee was appointed to draft resolutions on the deaths of two members of the Boone County Medical Society, Dr. J. R. Ball and Dr. H. N. Coons.

The guest speaker of the evening was Dr. Jas. T. Stygall, who gave an illustrated lecture on "The Present-day Methods of Treatment of Tuberculosis." Discussion followed by all members.

Motion for adjournment until the first Tuesday in September was made and passed.

DANIEL VANWOERKOM, M.D.,
Secretary.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

The following products have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in New and Nonofficial Remedies:

SYNEPHRIN.—Hydroxyphenylmethylaminoethanol Hydrochloride.—The hydrochloride of an alkaloid obtained synthetically. Synephrin is used as a vasoconstrictor. It is less toxic than either epinephrine or ephedrine, and its vasoconstrictor action, while not so pronounced as that of epinephrine, endures for a longer time. In combination with procaine hydrochloride it is useful for local anesthesia in dental operations and in minor surgery in cases in which a bloodless area is not required. The drug is also supplied in the form of Synephrin Solution "A", Ampoules Synephrin-Procaine, 3 cc., and Hypodermic Tablets Synephrin-Procaine. Frederick Stearns & Co., Detroit.

MEAD'S DEXTRI-MALTOSE WITH VITAMIN B.—A mixture containing approximately: maltose, 52.58 percent; dextrans, 39.80 percent; protein, 4.34 percent; mineral salts, 2.28 percent; and moisture, 1.00 percent. It is standardized physiologically to contain in each 2.5 gm. the vitamin B₁ and B₂ equivalent of approximately 1 gm. of dried yeast or 2 gm. of wheat embryo. Mead's Dextrin-Maltose with Vitamin B is proposed for use in the diet of infants suffering from vitamin B deficiency. Mead, Johnson & Co., Evansville, Indiana.—(*Jour. A. M. A.*, May 3, 1930, p. 1405).

SCILLAREN.—A mixture of the natural glucosides, scillaren-A and scillaren-B, occurring in fresh squill *Urginea maritima*, in the proportions in which they exist in the fresh crude drug; namely, about two parts of scillaren-A to one part of scillaren-B. Completely dried scillaren contains approximately ninety-eight percent of the active glucosides. Scillaren dried in a high vacuum at seventy-eight C. for fifteen hours loses not more than six percent of its weight. The cardiac action of scillaren is essentially similar to that of digitalis, but this action is apparently less persistent than that of digitalis. Scillaren is administered orally and is supplied in the form of tablets containing 0.8 mg. (1/80 grain) of scillaren and in the form of a solution containing 0.8 mg. (1/80 grain) of scillaren. Sandoz Chemical Works, Inc., New York.

SCILLAREN-B.—The amorphous component of the natural mixture of the glucosides occurring in squill, *Urginea maritima*. Completely dried scillaren-B contains approximately 99.5 percent active glucosidal substance. Scillaren-B dried in a high vacuum at seventy-eight C. for fifteen hours loses not more than five percent of its weight. The actions and uses are the same as those of scillaren. It is administered intravenously when immediate action is imperatively indicated. Scillaren-B is marketed in the form of ampoules each containing 0.5 mg. (1/130 grain) of scillaren-B. Sandoz Chemical Works, Inc., New York.

AMPOULES GLUCOSE (DEXTROSE, U. S. P.) LILLY, 50 GM., 100 cc.—Each ampoule contains dextrose, U. S. P. (New and Nonofficial Remedies, 1930, p. 245) 50 gm.; distilled water to make 100 cc.; accompanied by an ampule containing 4 cc. of a buffer solution. Eli Lilly & Co., Indianapolis.

PARKE, DAVIS & COMPANY'S COD LIVER OIL WITH VIOSTEROL 5 D.—A brand of cod liver oil with viosterol 5 D-N. N. R. (New and Nonofficial Remedies, 1930, p. 257). Parke, Davis & Co., Detroit.—(*Jour. A. M. A.*, May 31, 1930, p. 1761).

ACCEPTED DEVICES FOR PHYSICAL THERAPY

The following have been accepted by the Council on Physical Therapy of the American Medical Association for inclusion in its list of accepted devices for physical therapy:

COMPLEX ELECTRO-CAUTERY AND DIAGNOSTIC LIGHT (Complex Oscillator Corporation, New York). A device for cauterization by means of electrodes which are heated electrically to the desired temperature. The device con-

sists essentially of a transformer, designed to operate on either a 110- or 220-volt, 60-cycle alternating current circuit. The transformer is also tapped at such point as will give the desired voltage for the operation of a diagnostic light.

"STOPPOLLEN" AIR FILTER (Davies Air Filter Co., New York).—A simplified portable filter which delivers dust and pollen-free air. The apparatus is described as consisting of a cabinet rectangular in shape, which contains the filter screen, a pressure fan and an electric motor, and is so constructed as to fit into any sized window. The cost of operating the device continuously for twenty-four hours is about ten cents. Tests were conducted which demonstrated that the Stoppollen air filter was efficient as a means of keeping a room free from dust and pollens.—(*Jour. A. M. A.*, May 31, 1930, p. 1760).

PROPAGANDA FOR REFORM

TOBACCO ADVERTISING GONE MAD.—The modern tendency for advertisers of all kinds of merchandise to drag the health angle into their advertisements is one of the most disturbing features in the modern advertising field. The medal for the most horrible example would seem to go to the American Tobacco Company in the exploitation of Lucky Strike cigarettes and Cremo cigars. The exploiters of Lucky Strike cigarettes have claimed that 18,000 physicians have testified that "the heat treatment, or toasting process, applied to tobacco previously aged and cured" is likely to free the cigaret "from irritation to the throat." There was also started a campaign, "Reach for a Lucky instead of a Sweet," in which—either directly or by implication—young women were urged to smoke Lucky Strike cigarettes when they had a desire to eat candy, or pastry. Another branch of the American Tobacco Company's business has been carrying on an advertising campaign for "Crema" cigars in which the public is led to believe that most cigars are handmade and have their tips finished off with the saliva of the individual workman. Physicians will admit readily that many young women eat more candy than is good for them, but they certainly will not agree that the substitution of cigarettes in such cases is in the interest of public health. Physicians may also admit that, theoretically, it is possible for disease to be transmitted by means of cigars. But when one considers the millions of cigars that are consumed annually and that it is extremely difficult to find in medical literature any real evidence of the transmission of pathologic bacteria by means of cigars, the campaign of the Crema concern stands condemned.—(*Jour. A. M. A.*, March 15, 1930, p. 810).

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the Food, Drug and Insecticide Administration of the United States Department of Agriculture, which enforces the Federal Food and Drugs Act: Kroy Wen All Healing Ointment (The Manhattan Drug Company), consisting essentially of carbolic acid, zinc oxide, boric acid, sulphur and a volatile oil in a mixture of wax and wool-fat. Wag's Salve (Wag's Chemical Company, Inc.), a petrolatum product with oil of wintergreen and menthol. Winter Cerate (The Irvine Chemical Company), an ointment having a petrolatum base and containing the usual volatile oils. Amex (The Craig-Grandell Manufacturing Company, Inc.), an ointment having a petrolatum base and containing oil of wintergreen, oil of peppermint, menthol and myrrh. Quin-Lax (James Bailey & Son), containing acetanilide, cinchonine, aloin and cornstarch. Neuro-Nerve Powders (The Neuro Chemical Company), containing aspirin, phenacetine and caffeine. Laxative Phospho Quinine (Brewer & Company, Inc.), containing acetanilide, cinchona alkaloids, phenolphthalein, red pepper, gamboge and some other materials. Glycero-Terpin Compound (Boss & Seiffert Company, Inc.), containing a codeine salt, chloroform, terpin hydrate, ammonium chloride, tolu, glycerine and alcohol. Salicon (K. A. Hughes Company), containing 3.8 grains of aspirin, with phenolphthalein and calcium and magnesium carbonates. Capsi-

Quin (Boss & Seiffert Company, Inc.), containing about one grain of quinine sulphate, one and one-third grains of acetanilide and a small amount of red pepper in each tablet.—(*Jour. A. M. A.*, March 15, 1930, p. 811).

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the Food, Drug and Insecticide Administration of the United States Department of Agriculture which enforces the Federal Food and Drugs Act: Nutriol (Boss & Seiffert Company, Inc.), consisting essentially of calcium, iron, manganese, potassium, sodium and phosphorus compounds, with quinine, strychnine, extracts of wild cherry, a trace of fish treatment of lobar pneumonia, if a sufficient amount can be administered sufficiently early without untoward effect. To avoid such effect it is proposed to secure low absorption through the administration of the free base by mouth. The hydrochloride may be administered intramuscularly, but is liable to be irritant. Intravenous administration seems to be contraindicated. The drug has a definite value in the treatment of pneumococcal infections of the eye (*ulcus corneae serpens*).—(*Jour. A. M. A.*, March 22, 1930, p. 888).

COLLOSOL CALCIUM NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that Collosol Calcium was presented by the Crookes Laboratories, Inc., as a colloidal suspension of calcium oleate, containing approximately 0.85 percent of calcium oleate and 0.05 percent of calcium. The preparation is stated to contain one percent gelatin as a protective colloid and 0.5 percent of phenol and 0.1 percent of chlorbutanol as preservatives and to be intended for hypodermic and intramuscular injection. A similar preparation, Collosol Calcium Oral, containing the same amount of calcium oleate, is intended for oral administration. The Council reports that the label of the submitted specimens and the advertising makes no mention of gelatin, phenol or chlorbutanol. After examination of the available evidence the Council declared Collosol Calcium unacceptable for New and Nonofficial Remedies because it is an unscientific preparation of no proved value and marketed under unwarranted therapeutic claims. When the Council's report was sent to the Crookes Laboratories, Inc., the firm expressed willingness to mention on the label the presence of gelatin, chlorbutanol and phenol. It submitted a new advertising booklet and offered to submit further evidence. Since there appeared to be no possibility of the product being made acceptable, the Council authorized publication of its report.—(*Jour. A. M. A.*, March 29, 1930, p. 920).

FC-100.—Recently, Pittsburgh papers reported that two officers and two employees of a Pittsburgh bank had been poisoned following the taking of a "remedy for a cold." Investigation disclosed that the nostrum these four men took was known "FC-100," put on the market by oil, glycerin, alcohol and sugar. Trent's Tonic Cold Tablets (The Trent Laboratories), containing acetanilide, camphor and caffeine. Rau's Cold and Pain Tablets (S. Pfeiffer Manufacturing Company), containing aspirin, phenacetin and caffeine. Dar-Ling-Oil (The Hemlock Oil Company), containing camphor, chloroform, mustard oil and pine oil. Flaxseed Menthol Wild Cherry Cough Syrup (Hance Bros. & White, Inc.), containing benzoic acid, menthol, glycerin, sugar, alcohol and artificial coloring. Luft's Cold, Grippe and Influenza Tablets (George W. Luft Company, Inc.), containing aspirin, phenolphthalein, red pepper and traces of the alkaloids of aconite and belladonna. Thoxine (The Reese Chemical Company), containing a laxative plant drug, a pungent principle, such as red pepper, calcium carbonate and a sulphate. Bromo-Asprin (The Casey Chemo Therapy Company), containing 3 7/10 grains of aspirin, 2 3/10 grains of ammonium bromide and 1/2 grain of caffeine. Rider's Liniment (G. Haggard Rider), consisting of gasoline, with traces of oil of sassafras and camphor. Sedafen (Sedafen Products Company), containing acetphenetidin (phenacetin), acetyl-salicylic acid (aspirin) and caffeine.—(*Jour. A. M. A.*, March 22, 1930, p. 887).

ETHYLHYDROCUPREINE.—Clinicians of large experience

have grown skeptical about the use of ethylhydrocupreine (optochin) in the treatment of pneumonia, whereas they were once enthusiastic and hopeful about its possibilities. In a review of this subject, Cahn-Bronner cites an extensive literature and concludes from his own experience and a review of numerous authors that ethylhydrocupreine is not superior to quinine and that neither drug is a specific in the treatment of pneumococcus pneumonia. The following with reference to ethylhydrocupreine appears in New and Nonofficial Remedies: "Clinical investigation indicates that the drug may be of value in the the Food Chemistry Corporation of Pittsburgh, which has for its president P. S. Chambers. Presumably, this is the same P. S. Chambers who was connected with the American Chemical Company of Pittsburgh and the Research Laboratories of Pittsburgh, exploiters of AL-14, another nostrum exploited for the cure of colds. The Food Chemistry Corporation is today circularizing bank presidents and suggesting, by implication, that these bank executives purchase FC-100 for themselves and their employees. From an examination made by the A. M. A. Chemical Laboratory it may be concluded that the specimens of FC-100 examined consisted essentially of an effervescent mixture consisting of citric acid, potassium and sodium bicarbonates, along with traces of calcium and magnesium, and an overdose of an arsenic compound. Here, as in the case of AL-14, \$2 was charged for twelve tubes containing a few cents' worth of citric acid and baking soda, put out under the claim that the preparation is "not a drug" and that it is quickly effective in curing ninety percent of common colds!—(*Jour. A. M. A.*, March 29, 1930, p. 1010).

METATONE NOT ACCEPTABLE FOR N. N. R.—Shotgun tonic mixtures were very popular a generation ago and some received more or less official recognition by being included in the national Pharmacopeia. In recent years these tonic mixtures have fallen deservedly into disuse, although included in the line of preparations of many manufacturers. Occasionally an effort is made to revive the use of such tonics by the addition of an ingredient the use of which has become a current fad. One of the recent attempts in this direction is the exploitation by Parke, Davis & Co. of a typical shotgun tonic mixture, modernized by the addition of "vitamin-B extract." This preparation, known as Metatone, is stated to have the following composition: Alcohol, sixteen percent; vitamin-B extract per fluid ounce, ten grains; nucleic acid, two grains; calcium glycerophosphate, four grains; potassium glycerophosphate, four grains; sodium glycerophosphate, two grains; manganese glycerophosphate, one-half grain; strychnine glycerophosphate, 8/200 grain." The statement as to the amount of "vitamin-B extract" is meaningless and gives no indication as to the actual amount of vitamin-B present, and there appears to be no good reason for giving it along with the other constituents of Metatone. Most of the other constituents of Metatone long since have been discredited as useful therapeutic agents. The Council on Pharmacy and Chemistry declared Metatone unacceptable for New and Nonofficial Remedies because it is an unscientific mixture, marketed under a proprietary name with unwarranted therapeutic claims.—(*Jour. A. M. A.*, May 3, 1930, p. 1405).

COLLOSOL KAOLIN NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that Collosol Kaolin is the name given by the Crookes Laboratories, Inc., to a product stated to be "a prepared clay, giving a comminuted chemically inert material of high absorptive capacity." The use of the product is recommended in various conditions, including rheumatism, neuritis and asthma. The Council points out that the Germans who had employed it against dysentery during the war abandoned its use and substituted charcoal. The Council declared Collosol Kaolin unacceptable for New and Nonofficial Remedies because of the unwarranted therapeutic claims and because of possible dangers from the therapeutic use of the product.—(*Jour. A. M. A.*, May 3, 1930, p. 1406).

RECRESAL NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that Recresal is the product of Chemische Werke vorm. H. & E. Albert, Wiesbaden-Biebrich, Germany, and that, according to the information received from this firm, the product is sodium phosphate monobasic and is therefore nothing more than the well-known acid sodium phosphate, which is official in the U. S. Pharmacopeia as sodium biphosphate. While sodium biphosphate is used in medicine as a convenient form for the administration of an acid and as a saline laxative, Recresal is claimed to be indicated in all nervous affections, including neurasthenia, neuroses, physical and mental overexertion, etc., etc. During the World War reports came from Germany that the administration of sodium acid phosphate had produced astounding effects on the German troops in the promotion of muscular activity and of fatigue. An investigation of the subject by the United States Public Health Service showed that the administration of acid sodium phosphate does not increase muscular efficiency and that the feeling of well-being which followed was to be ascribed to the laxative action of the substance. The Council finds "Recresal" unacceptable for New and Nonofficial Remedies because the exploitation of a well-known drug under a proprietary, noninforming name is not in the interest of rational therapy; because the therapeutic claims advanced for it are unwarranted; and because the claims advanced for the preparation will lead to its indiscriminate and ill-advised use by the public.—(*Jour. A. M. A.*, May 3, 1930, p. 1406).

RULES OF THE COMMITTEE ON FOODS.—The Committee on Foods of the Council on Pharmacy and Chemistry publishes a revised statement of the information which should be submitted to the Committee by manufacturers who wish their food products included in the book "Accepted Foods". The Committee will consider all food products for which health claims are made as coming within its purview. If the health claims made are satisfactory to the committee, in view of the composition and process of manufacture, the committee will accept the product for its book, "Accepted Foods", and will grant to the product the use of the seal of the committee. If the product is found to be outside the scope of the committee in that no health claims are made for it, and if the product and the advertising are otherwise satisfactory, the product will be exempted. A list of exempted products will be published in the book, "Accepted Foods", and such products will be permitted to be advertised in the publications of the American Medical Association. A list of rejected foods will be published in the book, "Accepted Foods", together with the reasons for such rejections. Rejected products will not be permitted to advertise in any publication of the American Medical Association. Infant foods, whether health claims are made for them or not, are considered to be within the scope of the committee's consideration.—(*Jour. A. M. A.*, May 3, 1930, p. 1407).

THE SEAL OF THE COUNCIL ON PHARMACY AND CHEMISTRY AND OF THE COMMITTEE ON FOODS.—The seal may be used in advertising in circulars and on packages after acceptance of the product is announced. The seal, if it appears on the package, must be the only seal of such character and must not appear in conjunction with the seals of any other investigative organization. The seal is to be used without any comment by the advertisers, unless such comment has been submitted to the Council or the Committee and approved by them. Should the product, for any reason, become unacceptable, all use of the seal must be discontinued within six months. Only the seal authorized by the body accepting the product shall be used in advertising the product. Products exempted by either the Council or the Committee shall be permitted to be advertised in publications of the American Medical Association, but the use of the seal shall not be granted in connection with such advertising.—(*Jour. A. M. A.*, May 3, 1930, p. 1407).

THE LAXATIVE ACTION OF BRAN.—Bran has acquired an extensive vogue in this country as an adjuvant to

the diet to correct the widespread tendency to constipation. One of the features that particularly serves to recommend it in a popular way is the fact that it is not a drug.—(*Jour. A. M. A.*, May 3, 1930, p. 1410).

COFFEY-HUMBER METHOD FOR CANCER.—The remarkable publicity accompanying the introduction of the Coffey-Humber method for the treatment of cancer passed briefly into a quiet phase, leaped upward with the eastward jaunt to the congressional hearing, again became quiescent for a few weeks, and burst forth into a Sunday supplement feature. In the meantime pathologists, surgeons and other connoisseurs who have investigated the method express nothing but profound disappointment with both the clinical and the pathologic results.—(*Jour. A. M. A.*, May 3, 1930, p. 1410).

JOHN R. BRINKLEY, QUACK.—Newspaper reports on John R. Brinkley, who has been described as the "goat-gland grafter" and who has made a Kansas crossroads settlement into a second-class postal station, continue to bring stories of the experiences of a few of Brinkley's victims. Also, the publicity has brought out other facts that, while doubtless not news to those who are acquainted fully with Brinkley, have been unknown to the general public and the medical profession.—(*Jour. A. M. A.*, May 3, 1930, p. 1426).

ELECTRIFIABLE PLATES.—The Post Office Department reports that J. M. Hughes, his wife, Mrs. J. M. Hughes, and his daughter, Essie I. Hughes, all of Atlanta, Georgia, have for some time been defrauding the public under the tradename, "Electrifiable Company" in the sale of so-called heel plates. These plates were cut crudely from sheets of copper and zinc. They cost twenty-five cents a pair; they sold at \$5 a pair! It was claimed that, when worn in the shoes, the plates would cure hardening of the arteries, high blood pressure, enlargement of the heart, kidney trouble, hardening of the prostate gland, diabetes, rheumatism and dropsy! The Postmaster General issued a fraud order against the Electrifiable Company and J. M. Hughes.—(*Jour. A. M. A.*, May 3, 1930, p. 1427).

PLASMOCHIN.—"Plasmochin Compound" is stated by the manufacturer to be "sugar coated pills containing 0.01 gm. of Plasmochin and 0.125 gm. of quinine sulphate." The only way in which Plasmochin may be characterized as "extremely dangerous" is that its safe (but efficient) dose is much smaller than that of quinine. Its most important untoward effect is cyanosis due to methemoglobin formation. Abdominal pains also have been produced by it. It is liable to cause the symptoms of cinchonism, such as tinnitus and dizziness; and it has been charged with favoring the occurrence of blackwater fever. The Council on Pharmacy and Chemistry published a preliminary report on Plasmochin in 1927, when the product was not being marketed in this country. Now the Winthrop Chemical Company markets "Plasmochin Compound" but has not taken steps to make this preparation acceptable for New and Nonofficial Remedies.—(*Jour. A. M. A.*, May 3, 1930, p. 1429).

THE ACTIVITY OF OFFICIAL PREPARATIONS OF ERGOT.—Recently the conviction has grown among pharmacologists that, while undoubtedly histamine and tyramine play a part in the pharmacologic responses to ergot under laboratory conditions, they have little or nothing to do with the action of ergot as used clinically. It is held generally at present that the alkaloids are the important constituents. With the development of this belief has come naturally an insistence that preparations offered to the medical profession should contain them. In 1929 the Council on Pharmacy and Chemistry omitted from New and Nonofficial Remedies those preparations of ergot which, from their method of manufacture, were not likely to contain, or were not shown by proper methods of assay to contain, important amounts of alkaloids. The United States Pharmacopeia not only prescribes an efficient method of extraction in the preparation of the fluid-extract, the only official preparation, but requires in addition that the preparation be assayed by a biologic method which determines the alkaloidal content. An examination

of the market supply of fluidextract of ergot made in 1928 revealed only one of five to have less than the required strength. In this examination most proprietary ergot preparations were found to be altogether inactive or distinctly below the strength claimed for them. Similar results for proprietary ergot preparations, some of which are marketed in this country, recently have been reported abroad. Two investigations recently have been published that indicate that the deterioration of fluidextract of ergot does not proceed rapidly. There is no real reason why the American physician should not continue to use with confidence fluidextracts made by reputable firms in accordance with the Pharmacopeial method and shown by proper methods of assay to contain the activity required by the Pharmacopeial standard. If he uses other than official preparations he should convince himself that the nonofficial preparation used actually possesses the properties characteristic of a standard ergot preparation: if it has been accepted by the Council on Pharmacy and Chemistry for New and Nonofficial Remedies the composition and efficiency may be depended on.—(*Jour. A. M. A.*, May 10, 1930, p. 1504).

THE ACTION OF VITAMIN D.—Viosterol administered to animals over long periods in doses one hundred times greater than the minimum antirachitic level showed no effect on general appearance, growth, reproduction, or resistance to respiratory infections. An overdosage ten times greater was just perceptibly harmful, 4,000 times overdosage definitely injurious, and 40,000 times overdosage strongly toxic. Apparently the harmfulness may be modified by other dietary factors. Recent studies have made it clear that vitamin D controls calcification of the skeleton by dissolution and deposition of the bone salts. The mineral content of the bones is the resultant of these two actions. Calcium and phosphorus must be present in the diet in sufficient amounts and in appropriate relationship to each other before proper bone growth or calcification can occur. No amount of vitamin can correct an absolute lack of bone-building salts.—(*Jour. A. M. A.*, May 10, 1930, p. 1505).

LANTEEN LABORATORIES, INC.—A letter sent out by the "Medical Bureau of Information on Birth Control" states that the "Bureau" was not maintained for profit and that there was only a small charge of \$3 for a private consultation with a woman physician who was "specially trained in the science of birth control and the intimate facts of sex." This "Bureau" was called previously the "Mother's Birth Control Clinic," and apparently is a subsidiary of the Lanteen Laboratories, Inc., that was incorporated in 1928 under the name Chinolene Products Company, and which changed its name to the present style. A folder which the Lanteen Laboratories concern puts into the hands of women who go to it carries with it the implication that the methods used or recommended by the concern are "sure, safe, scientific" and never fail. The company has for sale various mechanical contraceptive devices and also medicinal preparations for local application. The latter are all given the generic name "Lanteen."—(*Jour. A. M. A.*, May 17, 1930, p. 1619).

THE ADJUSTOR.—Under the trade names "Dale Manufacturing Company" and "J. Dale," there was exploited from Chicago another one of the glass vacuum pumps which have been sold as alleged cures for impotence. It was called the "Adjustor." When the Dale Manufacturing Company were notified by the postal authorities to show cause why a fraud order should not be issued against them, postponement of action was requested. The "Adjustor"—also called the "Juvenator"—exploited by the Sampson Manufacturing Company, was declared a fraud in 1927. In 1928 the postal authorities issued a fraud order against the Vim Manufacturing Company and one A. Volta of Chicago, who conducted a scheme practically identical with that of the Sampson Manufacturing Company and the present concern, the Dale Manufacturing Company. In recommending the issuance of a fraud order against the Dale Manufacturing Company and J. Dale, the Solicitor for the Post Office Department stated that

the representations in the Vim Manufacturing Company scheme are identical with those being employed in the Dale Manufacturing Company scheme, and that the device offered for sale is the same, and that the promoter simply was changing his trade name and address to evade the effect of prior fraud orders. The fraud order was issued; also one against J. Veness, apparently another trade name used by the same quacks that conducted the Dale Manufacturing Company.—(*Jour. A. M. A.*, May 17, 1930, p. 1619).

RIVAL PROPHYLACTICS IN DIPHTHERIA.—The early success with toxin-antitoxin in this country has given to it almost exclusive use in prophylaxis. There are, however, other effective ways of reducing the toxicity of diphtheria toxin besides partial neutralization with antitoxic serum. The products of these newer methods have been used extensively in Canada and in Europe. In the schools of Milwaukee from 1925 to 1928 the respective percentages of immunity achieved by the use of toxin-antitoxin were eighty-five, sixty-two, seventy-five and sixty-nine. With diphtheria toxoid better results were obtained, only two out of 128 giving positive Schick tests after treatment. Another claim in favor of diphtheria toxoid is that it does not result in sensitization to horse serum. However, it is not likely that toxin-antitoxin produces any noticeable sensitization; further, the toxin-antitoxin may be prepared with goat or sheep serum. Diphtheria toxoid would seem to be at least as valuable as diphtheria toxin-antitoxin mixture and in the preschool child is probably to be preferred.—(*Jour. A. M. A.*, May 24, 1930, p. 1708).

THE PHARMACOPEIAL CONVENTION.—At the recently held Pharmacopeial Convention in Washington, the delegates with commercial interests far outnumbered those from the medical profession. For the interests that opposed medical control of therapeutics, leadership was assumed by Henry H. Rusby, the "sacred cow" of certain druggists. Rusby was testifier for the Wine of Cardui Company in its suit against the American Medical Association, a testifier for a firm against which the Post Office Department has issued a fraud order, a testimonial producer for the Fleischmann Company, and he has been the chief supporter of Ambruster, importer of Spanish ergot, in his attacks on the Food and Drugs Department. At the previous convention an agreement was reached that the scope of the Pharmacopeia, at least so far as concerned therapeutic usefulness, be determined by the medical members of the Revision Committee and that questions of pharmaceutical necessity be determined by the pharmaceutical members. At the present convention, Torald Sollmann offered a motion to instruct the Committee on Revision to charge the medical members with the responsibility of final decisions in the selection of products of therapeutic usefulness. This motion was not adopted; instead it was decided that a two-thirds vote of the Revision Committee would settle finally the question of inclusion of any article. Since the pharmaceutical interests far outnumber the medical representation, this means that pharmacists will determine the admission of drugs to the Pharmacopeia. It is clear that the U. S. Pharmacopeia is confronted with an epoch of degeneration against which the medical and scientific members of the Revision Committee are likely to fight a losing battle. The present organization of the U. S. Pharmacopeial convention is undemocratic and unscientific. Unless some scientific plan for the revision of the Pharmacopeia is adopted, it may be necessary to advocate government control of the entire matter.—(*Jour. A. M. A.*, May 24, 1930, p. 1707).

GOLD SODIUM THIOSULPHATE IN LUPUS ERYTHEMATOSUS.—Gold salts have provided an effective method of treating lupus erythematosus. The treatment usually definitely improves the condition and often gets entirely rid of it. Gold sodium thiosulphate is the salt generally used in the United States. The initial dose is ten mg. dissolved in two cc. of sterile distilled water, given intravenously. If this is well tolerated, the second dose is twenty-five mg. given from five to seven days later. After this the dose is repeated at weekly intervals. Doses up to fifty

mg. may be administered and they have been as satisfactory as doses of 100 mg. Occasionally severe reactions result from the use of the drug. The drug should not be pushed when symptoms occur from it.—(*Jour. A. M. A.*, May 24, 1930, p. 1715).

WEST'S GRAVITISER NOT ACCEPTABLE.—The Council on Physical Therapy reports that the device known as West's Gravitiser (William West, New York), also known as a tilting table, is intended primarily for use as a support on which a patient may rest at certain angles of inclination for the purpose of exercising within limits the vascular system for curative or health purposes. In the descriptive matter submitted, it was claimed that with this apparatus sight was restored entirely in acute retinitis, convulsions were aborted in one hundred and three out of one hundred and four seizures in epilepsy, symptoms of a rheumatic knee of two years' standing were controlled entirely in six weeks, "earache" was relieved in one treatment, nasal ulcers were controlled in four days, and bleeding in simple gastric ulcer was controlled in four days! The Council concluded that the Gravitiser is not capable of producing any effects that cannot be obtained by placing a patient on a stretcher or a bench and rapidly or slowly raising one end of it manually. The Council rejected the Gravitiser because absurd and unwarranted therapeutic claims were made for it and because its superiority over a simple device has not been demonstrated.—(*Jour. A. M. A.*, May 31, 1930, p. 1760).

SELECTION OF DRUGS IN HOSPITALS.—The hospital should afford unusual opportunities for enhancing rational drug therapy. There particularly may products be submitted to critical inspection. As Sollmann so pointedly remarked at the recent Congress on Medical Education, the "evaluation of therapeutic remedies is not usually among the features to which hospital authorities point with just pride of achievement." The hospital drug room, which reflects directly the medicinal requests of the staff, hardly has kept pace with the modernization of other departments of the hospital. As for proprietary medicines, the shelves often remind us of what Irons aptly terms the "chain drug-soda-fountain-lunchroom." While in most medical schools the student receives good courses in pharmacology, *materia medica* and therapeutics and is made familiar with New and Nonofficial Remedies, it is unfortunately true that when the student becomes an interne in a hospital he finds not unfrequently that irrational prescriptions are written by the "chief" of a service who has not kept pace with the trend of modern drug therapy. All too often he prescribes proprietary drugs when the same drug is obtainable under the pharmacopoeial name at a much lower cost. To mitigate the evils of the prescribing of proprietaries, Irons has suggested the issuance of a hospital manual which shall contain hospital rules and a formulary. The Council on Medical Education with the cooperation of the Council on Pharmacy and Chemistry is following up the suggestion and considering the preparation of such a manual.—(*Jour. A. M. A.*, May 31, 1930, p. 1764).

SERENIUM.—According to advertising material sent by E. K. Squibb & Sons to physicians, "Serenium" is " * * * the result of a search for a compound that would be superior to other chemotherapeutic agents in the treatment of genito-urinary infections * * * synthesized by Dr. Ivan I. Ostromislensky. * * * " The circular recites various more or less ideal qualities to be desired in such a preparation, leaving the impression that "Serenium" possesses these. For the claims made for the product the evidence is slight indeed. Squibb & Sons apparently have abandoned, so far as this preparation is concerned, the conservatism that has characterized the house for nearly three-quarters of a century. The advertising does not resent any real proof of merit. Squibb & Sons have not requested an examination of the product by the Committee on Pharmacy and Chemistry.—(*Jour. A. M. A.*, May 31, 1930, p. 1783).

USE OF THYROID IN OBESITY.—The use of thyroid in obesity should be controlled always by a previous basal

metabolism test. If this is normal or subnormal, it is safe for a physician to use thyroid. The best practice is to start with small doses of desiccated thyroid (Thyroid-eum, U. S. P.) gradually increasing. The small dose would be approximately 0.03 gm. ($\frac{1}{2}$ grain) twice a day. The physician must keep a sharp lookout for fast pulse, nervousness or other symptoms resulting from thyroid stimulation. An obese person should not expect reduction by thyroid unless his diet is restricted and when dietary restrictions are followed thyroid is not needed as frequently.—(*Jour. A. M. A.*, May 31, 1930, p. 1784).

FACIAL ERYSIPELAS

In the series of cases studied by DAVID SEEGAL and BEATRICE CARRIER SEEGAL, New York (*Journal of the A.M.A.*, August 10, 1929), facial erysipelas was most frequent from December to May. This period roughly coincides with the high frequency months for hemolytic streptococcus throat carriers and wound infections reported by Meleney at the Presbyterian Hospital, New York. In the period between 1870 and 1927, 13.5 percent of the total group of cases of facial erysipelas occurred in hospital personnel. Of this number only one was a physician and the source of his infection was difficult to trace. Forty-eight percent of the 281 cases of facial erysipelas occurred in patients after admission to the hospital. About one half of this number were medical patients, while the remainder had recently undergone some surgical procedure. Of the latter group, slightly more than half had had their operations limited to the face. In the past ten years there were a number of instances of cross-infection occurring in the hospital. The temperature in facial erysipelas is usually high during the first two days of the disease, and about three-fourths of all the patients have a temperature of 104 to 105 some time during the course of the disease. The natural course of facial erysipelas untreated with specific antisera is sometimes abruptly terminated by crisis in from four to seven days. In the group of patients acquiring facial erysipelas in the hospital, the condition was diagnosed in only forty-five percent on the same day that a significant fever appeared. Twenty-five percent of the cases were recognized one day after the rise in temperature; ten percent two days after the onset of fever, and twenty percent not until three or more days after the fever had developed. The death rate for facial erysipelas in this series is 19.6 percent. This high rate, in spite of the relatively small number of infants in the group, is explained as being due to the hospital rules in regard to the selection of cases, since half of the patients were suffering from other diseases before they contracted erysipelas. The death rate for facial erysipelas in the authors' series is about five percent when those patients with other serious illness are excluded from the analysis. Facial erysipelas extracts its highest mortality toll from the very young and the aged. Eighty-three percent of the patients in this series who died of facial erysipelas contracted the disease after admission to the hospital. Since only about one-half of the total number of cases of facial erysipelas developed in the hospital, it follows that the mortality rate is much higher among those individuals whose underlying illness was complicated by facial erysipelas than among those who came to the hospital suffering only with erysipelas. Facial erysipelas must therefore be considered as occupying a similar role to bronchopneumonia in hastening the death of sufferers from chronic, progressive, often incurable disease.

CAUSE OF CATARACT AND NONOPERATIVE TREATMENT OF INCIPIENT "SENILE" CATARACT

John E. Weeks, New York (*Journal A. M. A.*, February 8, 1930), asserts that except in the relatively few cases of occupational cataract, the development of spontaneous cataract is due to nutritional irregularities, such as a lack of a sufficient supply of acceptable pabulum or the presence of toxins in the pabulum supplied (as in diabetes, intestinal disturbances, and foci of infection).

or to endocrinopathy. While it is not possible to restore degenerated lens tissue much can be done, particularly in the early stage of the development of cataract, to arrest or to retard its development by improving systemic and local nutrition. In the endeavor to arrest or to retard the development of senile cataract, Weeks determined to supplement improvement in general health by improvement in local nutrition, if possible, by periodically increasing the flow of blood in the anterior tissues of the eye. A number of measures were tried; eventually a mixture of equal parts of a solution of boric acid, three percent, and glycerin was selected. It was found that this mixture, when instilled into the eye, produced a sharp, smarting sensation, lasting about a minute, and an active hyperemia. Hyperemia always follows the instillation of this mixture; tolerance, such as follows repeated instillations of ethyl-morphine hydrochloride, is not established; consequently it can be used indefinitely with the assurance of a uniform result. Patients were advised to instill the drops once daily, at night, in cases in which there was very little lens opacity; twice daily in more advanced cases. Although there is little danger of bacterial contamination, patients were advised to have the drops made fresh every month or six weeks. Treatment was discontinued only when arrest in the development of the cataract was assured. Patients were advised to report every six months or a year, or oftener if they thought necessary. All patients were notified of the presence of lenticular opacities (the term cataract was avoided when it was thought advisable) and thoroughly advised of the importance of the regular and persistent use of the drops. Patients were referred to their family physician for a thorough physical examination and were advised to have any conditions detrimental to health corrected, if possible. The tension of the eyeballs was tested in all cases by means of the tonometer (Schiotz) after it became available, whenever there was any suspicion of hypertension.

EMPHYEMA, ACUTE, CHRONIC AND TUBERCULOUS

Deryl Hart, Baltimore (*Journal A. M. A.*, Nov. 30, 1929), found that fifty of the fifty-seven cases of empyema which have come under his care within the past twenty months have been suitable for treatment with tidal irrigation. The age of the patients varied from three weeks to fifty years. The most striking change in the mortality rate has occurred in the group two years of age and under. Of the thirteen patients in this group only one died in the hospital, making a mortality rate of eight percent (sixteen percent if the patient who died after leaving the hospital is counted). This rate compares favorably with the results obtained in the clinic from 1915 to 1928, during which time the mortality rate among patients of this age was fifty percent when closed drainage was employed, and twenty-nine percent when rib resection and open drainage were used. Hart concludes that the use of tidal irrigation in the treatment of empyema enables the surgeon to use closed drainage, without obstruction of the drainage tube and with negligible leakage around the tube. Drainage is as good as or better than with a rib resection and open drainage. Osteomyelitis of the rib is less likely to occur than after a rib resection. Recurring abscesses are therefore infrequent. With a closed system the rate of expansion of the lung can be regulated by the proper use of negative or positive pressure. Patients with acute streptococcus empyema can be treated by early drainage. Patients with bilateral massive empyema can be treated by drainage, and sufficient lung expansion can be maintained by the proper adjustment of suction. Chronic or even tuberculous empyema cavities can be cleaned and obliterated either by irrigation and suction alone or by these in association with paralysis of the diaphragm and thoracoplasty. Bronchial fistulas close within a few hours' to a few days' time, while the relief of the cough is at times immediate. No patient has developed chronic empyema, and no patient has been sent out with a draining sinus.

Convalescence has been hastened, there is less thickening of the pleura, and chest deformity is almost unknown. The rapid return to normal occurs without any system of exercises or blowing of bottles. Complications referable to the method of treatment were rare. Other complications were numerous, diverse, and often multiple. The organisms were chiefly of the pneumococcus, streptococcus and staphylococcus groups.


INTRAVENOUS MEDICATION

Two hundred and sixty years ago, Pepys in his famous diary referred to intravenous therapy as an experimental curiosity. NORMAN M. KEITH, Rochester, Minn. (*Journal of the A. M. A.*, November 16, 1929), asserts that with the subsequent application of scientific methods to therapeutics, it has since become a recognized procedure in the practice of medicine. To this development physician, surgeon, physiologist and pharmacologist have each made important contributions. The intravenous method should not replace the older and simpler methods of administration of drugs but should be substituted only when the latter routes are inadequate or markedly disturbed by disease. Exact technic is essential. Intravenous therapy has assumed an important place in the treatment of specific pathologic conditions, and the indications for its use vary with knowledge of the underlying physiologic disturbance and with the available methods for treatment. Repeated transfusion was the best available remedy in pernicious anemia until Minot's discovery of the efficacy of the feeding of liver; now even a single merit of transfusion of blood or of infusion of a colloid solution in the treatment of hemorrhage and shock is still debatable. The importance of increasing the circulating fluid is generally recognized, but other variable factors must be considered when the agent to be employed is transfusion is rarely given in this disease. The relative being chosen. Further knowledge of the underlying factors in hemorrhage and surgical shock undoubtedly will lead to better and more logical therapy. The frequent failure or transfusion in severe toxemia has led to a trial of more heroic measures, such as exsanguination and transfusion, which possibly offer a more thorough method for ridding the tissue cells of offending poisons. In serious states attended by dehydration, immediate intravenous therapy often initiates recovery. On the other hand, the introduction of measures for dehydration for the reduction of either local or general edema has been similarly beneficial. The rapid effect of certain drugs, administered intravenously, on protozoan infections in experimental animals and in man already has led to therapeutic discoveries of practical value. However, the stimulus thus given to studies in chemotherapy has led and will lead again to new vantage points from which the age-long problems of various systemic infections may be successfully attacked.


RECTAL ADMINISTRATION OF LIVER EXTRACT (COD)

During the course of an investigation of the efficacy of liver extract derived from the cod, a patient was encountered by PAUL REZNIKOFF, New York (*Journal of the A. M. A.*, August 3, 1929), who developed pneumonia and could not retain the medication when given by mouth. A woman, aged fifty-eight, complained of faintness and weakness of four days' duration. She appeared to be well developed and fairly well nourished, chronically ill, and pale with a slightly yellow tinge to her skin. The positive observations were a few teeth left in the lower jaw in fair condition, a smooth, moist, clean tongue showing some atrophy, pale mucous membranes, a few fine rales at the right base, a soft blowing systolic murmur over the precordium heard best at the apex, absent knee and ankle jerks, absent vibratory sense up to the hips, and hypesthesia of both legs to pin prick. One week later the temperature began to rise and reached

(Continued on Adv Page xx)



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(Continued from page 348)

105. Coincident with this appeared signs of consolidation of the right lower lobe, characterized by moderate dulness, bronchial breathing and numerous, constant, moist rales. While the patient was in this pneumonic state, cod liver extract was started. The patient felt very sick and vomited the medication. Five days later the extract was begun by rectum, 45 cc. twice daily in 60 cc. of warm milk. The patient retained this at first for one-half hour and later for one and one-half hours. The rise of reticulocytes to twenty-one percent after four days' rectal administration is of sufficient importance to call this case to the attention of those who may be confronted with very sick patients who cannot take liver by mouth.

PLASTIC SURGERY OF FEMALE BLADDER AND URETHRA

Henry P. Newman, San Diego, California (*Journal A. M. A.*, February 8, 1930), says that the restoration of the female bladder and urethra following tears, hernial conditions or long standing disturbances from enfeebled supports not only is difficult and exacting in details but too often baffles the stereotyped methods of operative technique. The various conditions and types to be met are: (a) A complete or partial prolapse or hernia downward through a torn vaginal orifice or pelvic floor. (b) The same bladder and urethral conditions but with the pelvic floor intact, the main contributing factor being the want of proper muscular tonicity of the parts. (c) Complete or partial destruction of the entire lower portion of the bladder and urethra, with consequent loss of bladder and urethral control. He reports three illustrative cases and describes the operation he has devised.

PEPTIC ULCER AND CANCER OF STOMACH
J. SHELTON HORSLEY, Richmond, Va. (*Journal of*

the A. M. A., June 1, 1929), stresses the point that since at least one fifth of the cases of cancer of the stomach arise from peptic ulcer, it would seem advisable to watch patients with gastric peptic ulcer with great care. He reports a case that is interesting because of the relationship between ulcer and cancer. In this case it seems improbable that a small cancerous spot had existed for fifteen years during the time of the gastric symptoms. The logical conclusion is that this microscopic area of cancer had recently arisen in the region of a gastric ulcer as a result of the irritation of the ulcer. As two acini constituted all the definite cancerous tissue found in this case, it is possible that a thorough histologic examination of gastric ulcers may show the incidence of incipient cancer greater than it is generally believed to be.

DIAGNOSIS OF DIAPHRAGMATIC HERNIA WITH ACUTE OBSTRUCTION

The diagnosis of diaphragmatic hernia without the assistance of roentgenology or fluoroscopy is difficult, but examinations by these means are not always possible in cases of trauma or acute obstruction. Therefore, careful study of physical signs and symptoms incident to the condition is important. In three cases reported by Frank Scott Gibson, Cleveland (*Journal A. M. A.*, Nov. 30, 1929), the patients were suffering intensely or were in a state of shock so severe that the use of roentgenology was impossible. A history of a penetrating wound or a crushing injury to the thorax associated with complete gastric or intestinal obstruction points to the possibility of diaphragmatic hernia. Displacement of the heart to the right, and evidences of relaxed lung tissue at the left base associated with fixation of the costal margin on the same side, were the important signs in the diagnosis of the three cases reviewed.



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ORIGINAL ARTICLES

STATIC DEFECTS OF THE FEET*

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SOUTH BEND

With the possible exception of the eyes, no voluntary parts of the body receive more use and misuse than the feet. Civilized man, or for the matter of this subject, shoe-wearing man, has developed a problem of the feet which is unknown to the barefoot and sandal-wearing races. The importance of this problem may be appreciated better when it is known that this defect excluded more men from the army during the late war than any other. The loss in industry through inefficiency brought on by foot strain scarcely is comprehended. Many cases of physical suffering, with symptoms later to be outlined, bring many patients to the physician. It is true that many of these symptoms apparently are so far removed from the feet that often the case is not diagnosed.

It will be the object of this paper to describe the anatomy of the foot as it pertains to this subject; to outline the causes of abnormal function of these parts; to describe the symptoms produced and to bring out practical methods to correct such defects.

It seems reasonable, from a mechanical standpoint, that nature, in designing the foot, intended that the weight of the body be supported by bony and ligamentous structures and that muscles be used only for balancing when standing and of course for propulsion of the body in motion. This condition is the one that obtains in the normal foot.

Mechanically the foot is a segmented, elastic, arched structure bearing the body weight, which articulates with the bones of the leg at about the posterior third of the foot. The astragalus receives the weight of the body and incidentally bears more superincumbent weight than any other bone. The weight is transmitted to the os calcis behind and the cuboid and scaphoid in front, which two bones transmit it through the cuneiforms to the five metatarsals, the heads of which are the anterior supports of the weight-bearing arch. It is to be remembered that in the normally shaped foot part of the weight is transmitted to the ground on

the lateral side of the foot by the last metatarsal.

This longitudinal arch obviously would collapse if it were not held in its typical position by the ligaments of the foot. The ones lending most strength to the arch are the calcaneo-scaphoid and the plantar fascia. In addition to this longitudinal arch there is a normal arrangement of the bones of the foot forming a transverse arch, the outer end of which rests on the ground, the inner end rising to join the longitudinal arch at its summit. The hollow part of the foot thus formed may be styled a half dome so that when both feet are placed together the dome is completed. The entire bottom edge of this dome normally touches the ground and bears weight. As stated before the normal shape of each half dome is maintained by the ligamentous supports except when balancing is required. At this time there are five muscles which are material factors in maintaining the arch. One is the *tibialis posterior*, the tendon of which passes through a groove behind the inner malleolus and is inserted to all the bones of the tarsus except the astragalus and to all the metatarsals except the first and the fifth. Another is the *flexor digitorum longus*, which also passes behind the inner malleolus and inserts in the bases of the last phalanges of the lesser four toes. The *flexor longus hallucis* has a similar course inserting in the great toe. The *tibialis anterior* passes under the ligaments of the ankle anteriorly and helps maintain the arch by passing around the median aspect of the foot to insert beneath the first cuneiform and the first metatarsal. The *flexor brevis digitorum* arises in the os calcis and inserts in the second phalanges of the toes.

In view of the anatomy as presented, it is evident that the weight of the body comes down in the line of gravity through the astragalus to an elastic weight-bearing arch and is distributed through it to the ground. The line of gravity comes somewhat to the inside of the center of support and comes upon an arch weaker in its inner component than in its outer, so that the whole tendency of superincumbent weight is to capsize the arch inward. Against this tendency it is protected by muscles and ligaments. Foot strain becomes effective in causing pain, discomfort and disability from two causes: (a) strain of muscles,

*Presented before St. Joseph County Medical Society April 1, 1930.

joints and ligaments; (b) wrongly distributed pressure.

First among the causes leading to a collapse of the arch is the shoe. The first type of shoe used by man was simply a loose covering for the sole which constricted the foot in no way and hence caused no trouble. As the sense of beauty in man developed a shoe to suit the eye as well as protect the foot was developed.

At the end of the fourteenth century a boot for men made its appearance that ran out into a point so long that this point had to be held up by a chain fastened to the leg. This creation is said to have originated when a French king required a long shoe to avoid irritating his painful great toe. An artistic bootmaker extended the toe far beyond the painful spot; thus a novelty was born and immediately adopted by the lesser nobility and later by the populace at large. In the sixteenth century the broad-toed shoe came into favor when Henry VIII, suffering from the gout, had such a shoe made for himself. The fashionable people, seeking to emulate their king, began wearing broad-toed shoes and carried the style to such an extreme that they became a nuisance on the street, interfering with each other in walking. It became necessary in the reign of Mary to restrict the width of the shoe to six inches by royal decree. Also in the sixteenth century high-heeled shoes for ladies became fashionable after their introduction by Catherine De Medici, said to be very short of stature. The modification of this in the seventeenth century was a slipper mounted on a stilt varying from six inches to two feet in height. This contrivance not only increased the height of the wearer but served the purpose of indicating the social station of the wearer. The higher the stilt, the higher the social rank of the lady. The history of the development of footgear is a story of psychological interest. The various styles always have been adopted by the unthinking populace who merely aped the foot clothing of their social superiors, whether suitable for their feet or not. This unfortunate following of fashion makes a saleslady wear a high-heeled and pointed shoe through eight or ten hours of standing with great suffering often just to be in style with the lady of leisure.

Most of our shoes are made of more or less unyielding leather, and are not the shape of the human foot, but are almost invariably narrowed and somewhat pointed in the forward part so that the great toe necessarily is displaced outward. It must be remembered that normally the great toe forms the buttress of the anterior part of the inner arch in walking as it broadens the weight-bearing area and thus stabilizes the foot. If displaced outward, the great toe cannot grip the ground as it should and furnish a fixed point from which the muscles may serve in maintaining the arch. Painful corns and bunions are well-known results of tight, constricting shoes.

To understand the changes that a pronounced elevation of the posterior part of the foot, as provided by the high-heeled shoe, creates in the

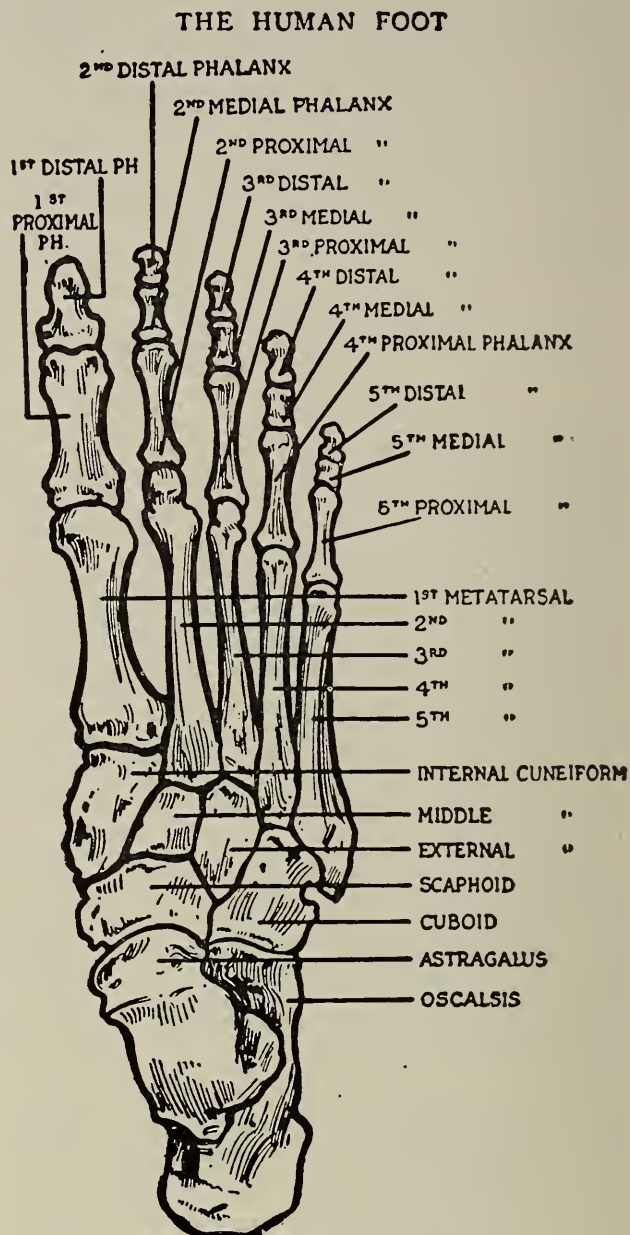


FIG. 1.—Bones of the foot, dorsal view.

foot and in the structures situated above it, it must be remembered that nature constructed the human mechanism in such a manner that when at rest and in an upright position the long axis of the body is at right angles to the sole of the foot. The high-heeled shoe vastly alters this arrangement. With the sole of the foot at right angles to the long axis of the body while standing, the body is in equilibrium. By placing a stilt under the posterior part of the foot, this equilibrium is disturbed. The body is tilted forward, but, since such a position of the body cannot be maintained, an instinctive effort is made to re-establish the body equilibrium. This is accomplished by (1) bending the body backward; (2)

by flexing the knees; (3) by extending the leg on the foot.

By bending the upper part of the body backward a lordosis is produced. This change in the vertebral column is responsible for a goodly part of the sacro-iliac strains and lumbar myalgias, as well as general fatigue.

The constant attitude of flexion maintained at the knees while standing in the high-heeled shoe soon overtaxes the extensor muscles of the knees and causes fatigue. These muscles, called upon to prevent a greater flexion of the knees by the weight of the body, a weight ordinarily supported by the bones of the leg, become spastic and painful. Cramps in the anterior part of the thigh, with a feeling that the knees are giving out, attest to the overuse of these muscles. On account of the sloping surface on which the foot rests in a high-heeled shoe, the head of the metatarsal bones are subjected to excessive weight bearing. This, combined with their being crowded into a shoe too narrow for them, is responsible for a great many painful conditions in the anterior part of the foot.

The high heel, usually quite narrow at the bottom, furnishes a very unstable base of support and is the cause of many strains to the ankle and the joints below the ankle. In persons with weak foot, in which the foot rolls over to the inner side, such a heel tends to aggravate the condition. The effect of the high heel is seen in the fact that sufferers from various types of weak foot number two women to one man.

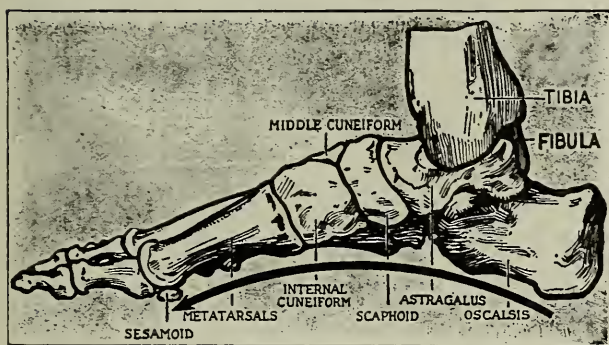


FIG. 2—Internal segment of longitudinal arch.

In addition to the modern shoe, the principal causes of foot strain are: (1) diminution in muscular and ligamentous support which occurs in acute illnesses and in cases of trauma to the leg resulting in muscular atrophy and loss of muscle tone; (2) excessive weight, which may be either excessive body weight or carrying heavy loads; (3) overuse of the feet as might occur in a person of sedentary habits who goes on a hike or takes up a new position obliging long hours of standing.

The minor symptoms of foot strain are so well known that their mention will suffice. They include undue perspiration, stiffness and lameness, oedema and an inelastic gait with a tendency to walk with the feet everted and not to rise on the toes. The flat-footed patient very carefully

manages to lift the ball and heel at the same time in order to prevent stress on plantar ligaments. Outward rotation of the feet and legs is, moreover, a favorite device in this mode of walking. It lessens the danger of anterior-posterior stress on the plantar ligaments, the foot being turned more or less over the inner border instead of over the ball of the foot at the end of the step. Stiffness and soreness of the muscles of the leg and thigh are often called rheumatic and treated as such.

Backache is a frequent symptom and one frequently not recognized. In every abnormal lowering of the arch there is of necessity an inward rotation of the lower leg accompanied by a similar rotation of the femur. This brings an unnatural tilting of the pelvis which induces muscular strain. This condition, in conjunction with the tendency toward lordosis caused by the high heel brings on a myalgia of the lumbar muscles often intense and variously diagnosed as lumbago, kidney trouble, ovaritis, etc. These attacks may confine the patient to bed. Gynecologists are aware that the diagnosis of retroversion of the uterus followed even by major operations has been made in many cases, when the diagnosis might have been found in the feet.

A woman aged forty-nine came to me with the history of having had severe backache for the preceding six years, each attack becoming more severe and obliging her to go to bed for periods varying from one to three weeks. She had such attacks every four to six months and had been advised at different times that she had a severe case of lumbago. Her history revealed that these severe attacks always came after a particularly trying day on her feet, such as assisting in the preparation and serving of a church dinner. Her examination was essentially negative except that she had second degree weak foot with definite ankle valgus. She was a wearer of moderately high heels.

After correction of this defect and instruction as to proper shoes and development of the feet through exercises, she has had complete freedom from a trouble which formerly caused her to spend at least a twelfth of the year in bed.

Chronic fatigue is perhaps the most common symptom and again one frequently overlooked. A case in point is that of a spinster, aged thirty-eight, whose complaint was a tired feeling in the lumbar region, frequently with a dull discomfort at the occiput and a chronic generalized fatigue, more marked upon being on the feet. These symptoms were of such severity that she had to abandon work involving much physical exertion. The correction of the foot defect she had relieved her entirely of these symptoms. Neither of these patients had had any symptoms referable to the feet and were reluctant to believe that their trouble might lie there.

In considering the treatment of static defects of the feet, the principles involved are very sim-

ple. They are to restore the relative positions of the components of the foot so that weight bearing is once more the function chiefly of bones, supported by ligaments and in balancing aided by muscles. This restoration usually must be achieved through mechanical aids which are to be discontinued as soon as the feet attain their normal function through corrective exercises and attitude and proper shoes.

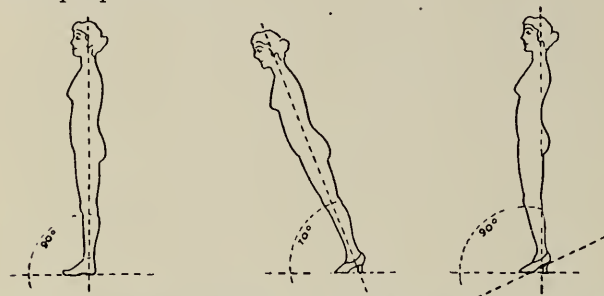


FIG. 3—Abnormal position due to high-heeled shoes showing lordosis, flexion at knees and extension of the feet on the ankles.

It is to be emphasized that pain and impaired function are the indications for treating these defects. Many individuals have arches quite low or even flat that give no trouble. Not a few went through the late war with rigid flat feet without the slightest discomfort.

The acutely painful foot, seen frequently among nurses beginning training and new police officers, should have complete rest before any effort is made to correct the defect. After the acute stage has subsided the foot should be started on non-weight bearing exercises. After all pain is gone, the foot should be held in inversion and adduction by adhesive plaster straps with a felt pad under the arch, after which weight bearing may be established. The patient must be instructed in exercises that will restore normal strength to the muscles involved. These exercises are various and will suggest themselves to every physician. Likewise in all types of static defects, proper posture in standing and proper use of the feet in walking should be taught the patient.

Ankle valgus is a condition found more frequently than weak or flat foot. In it the line of weight bearing is shifted medially, often falling far inside the longitudinal arch of the foot. The strain on the muscles of the leg and foot is obvious. Correction in this condition can be brought about best by shifting the line of weight bearing back over the foot where it belongs, by using a wedge in the sole of the shoe so that the inner side of the heel and sole are from one-eighth to one-fourth inch thicker than the outer side. The thickness of the wedge is determined by the amount of valgus present. By splitting the sole and heel and inserting the wedge between the layers, a neat appearing shoe can result.

At this point it will be well to say that persons undergoing treatment will be obliged to forego style in footwear. Through modification of the shoes will come a considerable part of the relief from symptoms.

It is obvious that, in the case of women, high heels with a narrow base can have no place in our program. Women used to the high heel, however, must have this heel reduced gradually, for a gastrocnemius muscle contracted to accommodate itself to a high heel frequently will become spastic and painful if a change is made suddenly to a low heel.

In treating weak or flat foot, in which the parts are flexible, our problem is similar to that with ankle valgus. The foot at rest can have the arch restored to normal, but immediately upon weight bearing the arch falls, accompanied by abduction and eversion of the foot. The simplest treatment of mild types is to increase the thickness of the inside of the heel, and, if needed, place a small wedge on the inside of the sole just behind the head of the first metatarsal. This tilts the foot onto the outer border and makes the patient turn the toes in when walking, so the weight comes on the foot in its position of strength. Patients with strained arches should be warned never to stand barefooted. When relaxed in the improper position, stretching of the irritated structures occurs and recovery is delayed.

In more pronounced cases of flattened arches, the wedged sole may not be sufficient. In moderately relaxed arches, strapping with adhesive strips, which help the arch retain its proper position, is effective until such time as the patient, through the exercises and proper walking, does not require it further.

Arches that are quite relaxed are best aided in recovering themselves by means of a firm support. Such a support should accurately fit the arch. Spring steel or monel metal are the most suitable materials and such braces are made by various companies when furnished with a mold of the foot. A mold is easiest made with a sheet of dental wax which can be made to conform to the foot after softening in warm water. Plaster of Paris is used by many for this purpose.

There are those who object even to the temporary use of the foot plate because it interferes with muscle development. This is erroneous in that contraction of the muscles of the leg and foot raise the arch from the plate. The plantar fascia already is overstretched when the patient comes for treatment and hence need not be considered.

The danger of injury to the feet by the too constant use of plates is to be borne in mind. The plate is to be regarded in the same light as a crutch or cane in the case of any joint unable to bear the strain of normal use and is to be discarded when the normal strength has returned and irritability has disappeared.

The condition of rigid flat foot usually is of long standing and cannot be corrected by the simpler means used in flexible flat foot. Since adhesions prevent motion between the bones of the foot, they must be broken up as in the case of traumatic arthritis in any joint. A general anesthetic is necessary when forcibly making the

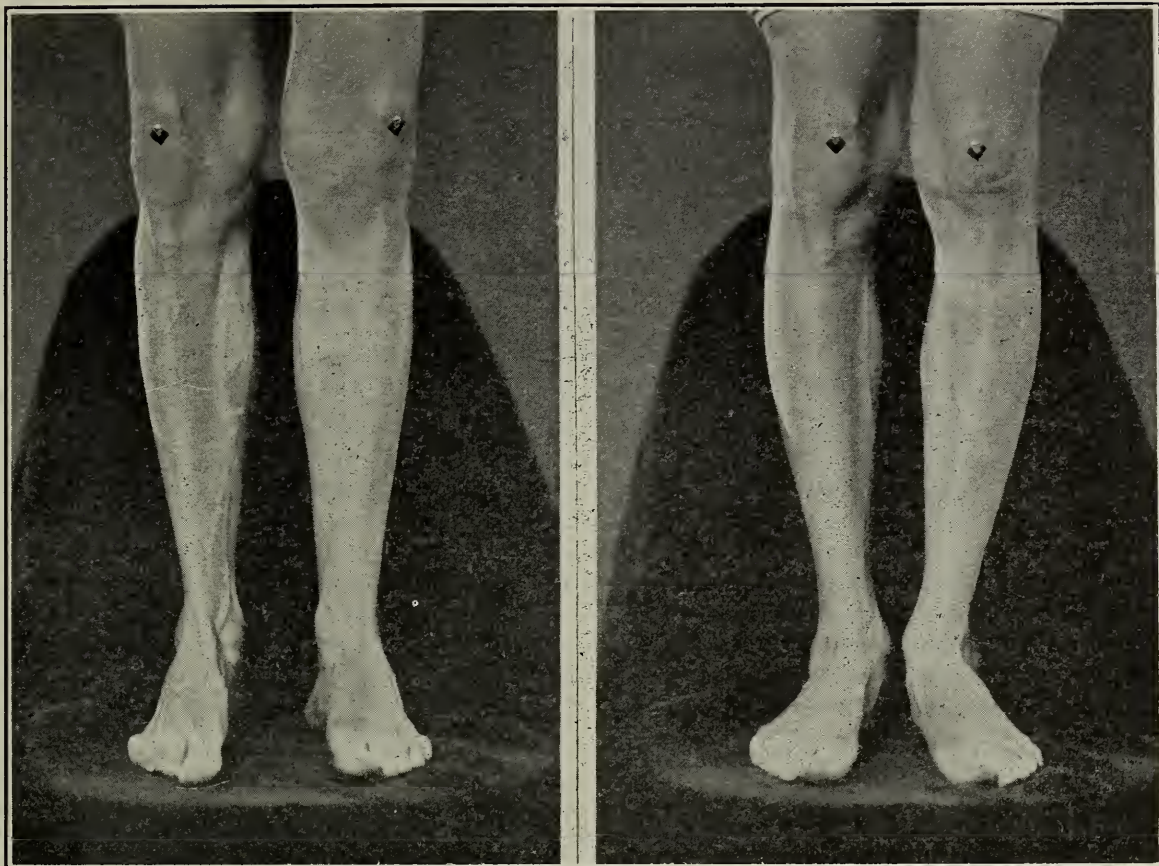


FIG. 4—Illustrating inward rotation of the femur accompanying weak foot, causing a tilting of the pelvis forward and lumbar muscle strain.

foot flexible in every way. For best results this should be done thoroughly. The foot is then treated as the acutely painful foot with rest in bed until non-weight bearing motion is painless, after which artificial supports and exercises complete the cure.

Defects in the arch formed by the anterior heads of the metatarsals cause discomfort in a great many people. The wearing of high heels, with the great increase of weight thrust on the heads of the metatarsals, forcing them into shoes often too narrow account for most of these symptoms. Pathologically they are explained by the compressing of nerve twigs between the heads of the bones and not infrequently cases appear in which the head of one bone has been forced down out of its proper place, compressing nerve twigs between the bone and the shoe. A recent case was that of a woman who would be seized with such severe pain that she would have to hasten to sit down and remove the shoe wherever she might be, obtaining considerable relief by massage about the head of the metatarsals.

Where the high-heeled and narrow-toed shoes are responsible, the treatment is obvious.

In cases where one metatarsal head is lowered, as in the patient just mentioned, a small felt or leather pad glued to the insole just back of the head of the bone serves to keep the bone in its proper relation and relieves the condition.

Another group of cases with pain about the heads of the metatarsals is relieved when some of the weight is taken from the heads of the bones and is shifted backward along the shaft of the metatarsal by means of a ridge placed back of the heads, either on the insole or between the layers of the sole. Such an insert is called an anterior heel.

A great many of the cases of anterior metatarsal arch pain occur in feet with an abnormally high arch in which the heads of the metatarsals and the os calcis bear all the weight. This is one type of foot that needs a permanent elevation of the shoe under the arch so that the lateral side of the foot and the anterior half of the metatarsals assist on weight bearing. This correction alone will be curative in such cases of high arch or *pes cavus*.

Summary: Static defects of the feet constitutes an important orthopedic subject. Symptoms are common and frequently are so far removed from the foot as to be undiagnosed.

The anatomy of the foot is such that superincumbent weight tends to capsize the arch inward.

The modern shoe is the most important among the factors causing static defects of the foot.

Correction of these defects is based largely on the mechanics of the foot. The use of proper mechanical aids is indicated until the foot has

recovered its normal function through exercises, proper posture and proper shoes.

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A COMPARISON OF TUBERCULIN SKIN REACTIONS*†

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Much is being said at present concerning the diagnosis of tuberculosis in childhood, and the importance of the tuberculin skin reactions is being emphasized justly. Unfortunately many of us put too much reliance in a single skin test, and this is especially true if the Pirquet method is used. The fallacy of this has been mentioned previously by different investigators. I do not intend to speak of the interpretation of positive or negative skin reactions, but I shall speak of the various methods which may be employed, their comparative values, and factors which influence them.

There are four usual methods: first, the Moro, or percutaneous; second, the von Pirquet, or cutaneous; third, the Mantoux or intracutaneous, and fourth, the Hamburger "stichreaction," or subcutaneous. May I speak briefly of the technique for these methods?

The percutaneous or Moro method is used much more commonly in Europe than in the United States and is a modified Moro test. The original method was discarded by Moro himself because of the comparatively small number of positive reactions. Hamburger and Stradner¹ found that by concentrating the old tuberculin over a steam bath to a constant weight, a much more active substance was obtained. Widowitz² further improved the test by cleansing the skin with ether in order to remove the fat from the pores before applying the tuberculin. These modifications of the original Moro test have increased the reliability of this method considerably. It is accepted generally, however, that the Moro and Pirquet tests are not as reliable as either the Mantoux or Hamburger stichreaction.

The tuberculin I use is prepared by the Hirsch-Apotheke, Frankfort-on-Main, and always is standardized by Hamburger's Clinic in Graz. The preferred site for the test is the skin over the sternum, which is cleansed vigorously with an ether sponge until an area of erythema develops; then a small portion of this prepared concentrated tuberculin, pinhead size, is rubbed well into this area. The reaction is read after twenty-four and forty-eight hours. An area of erythema is not sufficient for a positive test, as

a definite folliculitis is necessary; minute papules, vesicles or sometimes pustules, surrounded by some degree of inflammation, indicate a positive reaction. This percutaneous test is recommended because of its simplicity, and it is painless; no instruments are necessary, consequently the child is not frightened in the least by this procedure.

The Pirquet test is done by cleansing an area of skin, usually the anterior surface of the forearm, with ether or alcohol. Two drops of tuberculin are placed on this area about six to eight cm. apart. The epidermis is broken by either a linear scratch or by a scarifier, first midway between the two drops of tuberculin as a control, then through each of the two drops. It is better not to draw blood. An area of erythema and induration of at least one cm. in diameter at the site of the test at the end of twenty-four to forty-eight hours indicates a positive reaction if the control shows no similar reaction. A pseudo-positive reaction, due possibly to trauma, has been described frequently as a source of error in this method, a factor which is eliminated by either of the three other methods.

The Mantoux test is accepted generally as the most reliable of any of these methods, but it is also the most painful and the most difficult to perform. The test is made by injecting intracutaneously a solution of tuberculin so that a wheal is produced in the skin, similar to the Schick test, which is rather painful. The dilutions must be made accurately with normal salt solution and must be prepared freshly, which complicates the use of this method in general practice. Because of the danger of a generalized reaction, it is advisable to begin with injections of .001 or .01 mg. of O. T. and, if negative, injections of .1 and 1 mg. are made at intervals of twenty-four hours. A positive reaction is manifested by an area of erythema and induration, at least one cm. in diameter, at the point of injection.

The Hamburger "stichreaction" is essentially the same as the Mantoux except for the depth of the injection, as in this method the deposit of tuberculin is made subcutaneously. The same dilutions and dosages are used. The advantages of this method over the Mantoux are that it is definitely less painful, and the injection is made much more easily. A positive Hamburger reaction usually shows a greater area of induration and not such pronounced erythema, whereas in the Mantoux reaction the erythema is usually the most marked indication.

I never have heard of a series of cases being observed in which all four tests were done on the same individual at the same time, thereby making the comparison under the same conditions, so I selected twenty-five patients known to be either active or inactive cases of tuberculosis and made this study. The same old tuberculin was used for all of the methods with the exception of the Moro, and the preparation used for this technique was of known potency.

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†From the Children's Hospital, University of Graz, Austria.

The results of the first month's tests were as given in Fig. 1.

| | | | | | |
|--|----------|--------------|-------|--------|--------|
| Moro | Positive | Negative | Total | % Pos. | % Neg. |
| (Percutaneous) | 24 | 1 | 25 | 96% | 4% |
| Pirquet | 19 | 6 | 25 | 76% | 24% |
| (Cutaneous) | | | | | |
| Mantoux +, Hamburger — | | | 14 | | |
| Hamburger +, Mantoux — | | | 0 | | |
| Reaction from Mantoux greater than Hamburger | | | | 21 | |
| Reaction from Hamburger greater than Mantoux | | | | 6 | |
| Reactions equal— | Positive | 21, Negative | 25 | | |

FIG. 1. Results from the tests during the first month.

The percentage of positive Moro and Pirquet tests is slightly higher than found in other series, but only twenty-five cases is not a sufficiently large series to draw conclusions of this type. However, the superiority of the percutaneous test over the Pirquet reaction compares favorably with the observations of others, as shown in Fig. 2³, which is a compilation of results by three investigators who made this study on series of from three to five hundred cases.

| | | | |
|----------|-------|---------------|---------|
| | Moro | Modified Moro | Pirquet |
| Stradner | 51.1% | 84% | 76.6% |
| Wallgren | ----- | 83% | 76 % |
| Czickeli | 47% | 80.3% | 66.6% |
| Rust | ----- | 96% | 76 % |

FIG. 2. Comparison of cutaneous methods.³

The most unexpected findings in my series were the comparison of the Mantoux and Hamburger reactions. The Hamburger stichreaction is used entirely in most of the children's clinics of Dusseldorf, Berlin and Graz, and its reliability as compared to the Mantoux test has been established definitely; in fact, most authorities believe that the two tests may be used interchangeably. From Fig. 1 may be seen that I found a marked difference between these two methods during the first part of my experiment. Why should this difference be so great at this particular time? I had others repeat the injections in order to eliminate the personal element of error, and similar results were obtained. I compared the tuberculin I was using with some Norwegian O. T. of known strength and found them of practically equal potency. This work was done in the Children's Hospital, University of Graz, which is under the direction of Professor Hamburger. He was surprised greatly by my findings and stated that it was the only time he had ever witnessed such marked differences since the time he first had described the stichreaction. The greatest difference usually was noticed in patients known to be active cases, although there were a few exceptions. The Mantoux and Hamburger tests were repeated together at intervals of about ten days, and I was surprised to find a gradual, increasing tendency for these two tests to be equal in reaction. By the end of six weeks, both tests were equally strong and continued so. These cases which showed this difference between the two injection methods had had strong cutaneous reactions.

| | | | | | | |
|--------------|-------|------|-------|-------|------|-------|
| KATHI FOTSCH | | | | | | |
| | Dose | 11-5 | 11-14 | 11-25 | 12-4 | 12-11 |
| Moro | | ++ | | | | |
| Pirquet | | ++ | | | | |
| | .0001 | — | | | | |
| Mantoux | .001 | | — | + | + | + |
| | .01 | — | — | | | |
| | .1 | ++ | ++ | | | |
| | .0001 | — | | | | |
| Hamburger | .001 | | — | — | + | + |
| | .01 | — | — | | | |
| | .1 | — | ++ | | | |

FIGURE 3.

Fig. 3 is a typical illustration of the findings in one of the active cases, a case of extensive pulmonary tuberculosis in a child eleven years old. A strong Moro and Pirquet reaction was observed at the beginning of the experiment, whereas the reactions to the Mantoux and Hamburger tests were reduced, as evidenced by the necessity of injecting comparatively large doses of tuberculin before a positive test was obtained. On admission to the hospital the previous summer, this patient had shown a positive Hamburger reaction with a dose of .0001 mg. tuberculin. When the injections were repeated at intervals of approximately ten days, the doses necessary for a positive test gradually decreased; the Mantoux test being the more sensitive of the two methods for a month, at the end of which time the two tests became equal in reaction.

In 1914 Egert⁴ described his "Contrast Phenomenon" in which he suggested that in active cases of tuberculosis a strong positive Pirquet may be seen, whereas subcutaneous doses of .001 or .01 mg. O. T. gives either no or a very weak reaction. This "Contrast Phenomenon" has been received both favorably and unfavorably by other investigators and is now considered to be of theoretical rather than practical interest. In the detailed report of my tuberculin studies I have offered this as a possible explanation for the weakened Mantoux and Hamburger reactions in my series, and I suggested that the Mantoux as well as the Hamburger reaction may be decreased in intensity as compared to the cutaneous tests, which is, of course, an amendment to Egert's "Contrast Phenomenon." It is my belief that during these periods of decreased intensity of reaction to tuberculin the Mantoux method is not affected as much as is the Hamburger stichreaction, thereby explaining why at times the intracutaneous test is positive and the subcutaneous reaction is either negative or weak. It is also my belief that both tests will be positive, at times when this contrast phenomenon is demonstrable, if the doses of the injections are increased sufficiently.

It is of interest to notice the marked difference in the incidence of positive skin reactions to tuberculin as reported by different authors. What are some of the factors responsible for these discrepancies?

The compilation by Smith⁵ of the results of different investigators illustrates this marked difference. The results in these series are not truly indicative of the incidence of tuberculosis in children because these tests were made by the Pirquet method and on cases suspected of tuberculosis, or known to have had contact with cases of tuberculosis. We realize that the incidence varies in different sections of the country, but it is hard to conceive of such great differences as given here. The natural explanation is a difference in the method of selecting cases, but the question of the reliability of the Pirquet reaction is also to be considered. Just how reliable is the Pirquet reaction as compared to the other methods? The comparison between the Pirquet and the Mantoux or Hamburger stich tests in the clinics of Berlin, Dusseldorf and Bellevue, New York, is given by Smith⁵ and shows a difference of approximately fifty percent in favor of the injection methods. Other authors report differences of from four to sixty percent between the Pirquet and the injection methods, usually around forty percent; however, all agree that the Pirquet reaction is less reliable.

What are some of the factors which influence any of these methods?

It is a generally known fact that in cases of miliary tuberculosis the cutaneous tests are usually negative and the reactions to either the Mantoux or Hamburger tests are decreased markedly. The same is true in the acute febrile stages of measles, German measles, chicken-pox, influenza, poliomyelitis, pneumonia and other diseases,⁶ but in all of these conditions, including miliary tuberculosis, I believe that if a tuberculous infection has been or is present, a positive reaction to either the Mantoux or Hamburger methods may be obtained if the dose is increased up to one mg. O. T. or more, if necessary.

Seasonal variations were described by Hamburger⁷ for he states that the reaction of the skin to tuberculin is greater in the late winter and spring months than is found during the summer and autumn, due probably to some effect from exposure to the sunlight. Morabito⁸ strengthened this theory later by showing that exposure of the skin to ultra-violet light decreased the sensitivity to old tuberculin.

Ossoinig⁹ has described a period of decreased sensitivity occurring from the fourth to seventh days following an injection of tuberculin which he designates as a negative phase, whereas the period of increased sensitivity, found from the eighth to tenth days, is known as the positive phase. These periods should be considered in repeating tests.

In conclusion I wish to emphasize the importance of the comparative values of the cutaneous and injection methods for testing the skin's reaction to tuberculin. The importance of the tuberculin skin reaction as one of the important aids in the diagnosis of tuberculosis in childhood is

an established fact, yet too often are we satisfied by the false security of a single negative Pirquet reaction.

There are times, such as the febrile stages of acute diseases, massive tuberculous infections, seasons when exposure to sunlight is prominent, and other unexplained irregular periods in which the skin's sensitivity to the tuberculin test is reduced greatly. At such times it is necessary to use larger doses of one mg. or more of tuberculin before one may say accurately that the skin reaction is negative. It is necessary, of course, to increase the dosage gradually in these cases in order to prevent the occurrence of a generalized reaction.

I also wish to offer for your consideration the possibility of a second contrast phenomenon as an indication of activity in tuberculosis, *i. e.*, cases in which a strong cutaneous or Pirquet reaction is seen concurrent with a definitely weakened Mantoux reaction. I grant that this observation is of theoretical rather than practical value because of its infrequency of occurrence, but it is of interest and a subject for meditation.

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THE MANAGEMENT OF ACUTE INTESTINAL OBSTRUCTION*

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The title of this paper may seem to suggest that the diagnosis of ileus be assumed, but it would be apropos here to review its classification, etiology, pathology, research results, symptomatology and diagnosis in order to be in accord upon the actual type of cases we are going to discuss and treat. Intestinal obstruction is the term used for the condition in which fecal movement is mechanically impeded or prevented and may be classified under several headings, as follows:

Classification: First, as to etiology:

- (1) Paralysis of the muscular tunic of the bowel. (adynamic obstruction). Under this heading come the following:
 - (a) From operations upon the mesentery.

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- (b) From prolonged strangulation.
- (c) From spinal cord injury.
- (d) From afferent nerve lesions.
- (e) Reflexly, due to diaphragmatic pleurisy, acute intoxications as pneumonia and typhoid fever, strangulated omentum or torsion of a tumor upon its pedicle to the degree of strangulation.
- (f) From septic, local and general peritonitis and mesenteric embolism.
- (g) From uremia.
- (h) From tabetic crises.
- (i) From acute pancreatic disease.
- (2) Spasticity of the muscular tunic (dynamic ileus), which is rather rare. Under this heading come the following:
 - (a) Spastic, without known cause.
 - (b) From lead poisoning.
 - (c) From chronic tyrotoxic poisoning, *i. e.*, ptomaine poisoning.
 - (d) From renal and gall stone colic.
- (3) Mechanical ileus, which again may be divided into:
 - (A) From external hernia:
 - (a) Inguinal.
 - (b) Femoral.
 - (c) Umbilical.
 - (d) Ventral.
 - (e) Lumbar.
 - (B) From internal causes:
 - (a) From strangulation, brought about as follows:
 - (1) By adhesions and bands.
 - (2) By intussusception.
 - (3) By volvulus.
 - (4) By hernia.
 - (5) By diverticulæ.
 - (6) By peritoneal pockets.
 - (b) From obturation, brought about as follows:
 - (1) By neoplasms, internal and external.
 - (2) By fecal impaction.
 - (3) By foreign bodies.
 - (4) By cicatricial contraction.
 - (5) By congenital stenosis.

Second, as to degree of obstruction:

- (a) Partial.
- (b) Complete.

Third, clinically:

- (a) Acute, brought about by a sudden narrowing or occlusion of the lumen of a portion of the intestine. If there is not only interference with the passage of the fecal current but also obstruction of the blood current in the wall of the bowel, the condition also becomes one of strangulation.
- (b) Chronic, brought about by a gradual narrowing of the lumen of a portion of the intestine which may at any time become acute.

Fourth, as to pathology:

- (1) Intestinal obstruction without gangrene, known as simple obstruction.
- (2) Intestinal obstruction with gangrene, known as strangulation.

Pathology: If the circulation is interfered with, changes in the gut occur as follows:

- 1. Desquamation of lining epithelium.
- 2. Penetration of bacteria through wall of bowel.
- 3. Exudation of serum, leukocytes and red cells from both serous and mucous surfaces.
- 4. The peritoneal surface becomes red, purple, black and gray with a grayish plastic adherent exudate.

In the higher forms of obstruction the metabolic changes are most marked. There is toxemia with marked destruction of tissue-protein and alkalosis. Nitrogen excretion is increased, with an excess of non-protein nitrogen and urea in the blood. Chlorids are reduced in the urine and blood. Alkalosis, shown by high plasma carbon-dioxid combining power, occurs from loss of chlorids, probably through vomiting.

Research Work: A vast amount of research work has been done in the past twenty years in order to determine the exact cause of the high mortality in acute intestinal obstruction. Most workers agree that the stagnated intestinal contents form virulent poisons which are supposed to attack first the musculature of the intestinal wall, and then, after absorption, the heart and nervous system. All agree that the higher the obstruction occurs in the intestinal tract the more quickly developed and the more pronounced are the constitutional symptoms. The big question which every research worker is striving to answer is, "What is the exact cause of such dangerous constitutional symptoms?" Ashhurst suggests that perhaps it is due to deprivation of hydrochloric acid, from its retention above the obstruction whence it is not absorbed readily. According to Draper, of New York, the source of the toxemia, especially in high obstruction, is supposed to be from the mucosa of the upper intestinal tract, particularly the duodenum. The secretions from above are neutralized normally or detoxicated by the mucosa of the lower intestinal tract, which may explain why high obstructions are more rapidly fatal than low obstructions. In 1911 Fred T. Murphy and Beth Vincent, after many experiments, had about concluded that the toxemia was purely bacterial in origin. In 1912 Stone, Whipple and Bernheim reported results of experiments from which they believed that the toxic material formed in obstruction is independent of food substances or of secretions of the stomach, liver or pancreas. Injection into the vein of a normal dog of the toxic material from an obstructed loop of bowel reproduced the picture of experimental obstruction. Whipple has isolated a toxin which is found both in the intestinal contents of an

obstructed loop and in its mucosa. This toxin is not absorbed by the normal mucosa of unobstructed bowel. His deduction is that the intestinal mucosa from some perversion of its function due to the obstruction is a source of the toxin. Dragstedt, Cannon and Dragstedt in 1920 to 1922, after many experiments, contend that intestinal obstruction leads to the development of proteolytic intestinal bacteria without regard to the character of the diet, and that the intestinal secretions do not inhibit the growth of gram negative or proteolytic bacteria in a closed intestinal loop. According to them the toxin produced is of the class of amines. The disappearance of gram positive bacteria in a closed intestinal loop seems to be due to the absence of carbohydrates as well as to the alkaline reaction of the intestinal secretion. When a closed isolated loop of bowel is washed with a saturated solution of tannic acid previous to closure it does not become distended, and there is no toxemia, although what contents accumulate in the loop show many living gram negative bacteria even months after the loop has been closed. Without this preliminary preparation a closed loop becomes distended and there is death from toxemia in a few days. Thus these research men differ with Draper and Whipple and their belief is that bacterial activity plus necrotic tissue, or the absorption of toxic products resulting from the action of putrefactive bacteria on necrotic tissue, is the important factor in the rapid death in simple closed intestinal loops. In 1924 Harvey B. Stone reported his experiments with a conclusion that pressure is an important factor in intestinal obstruction, and that the increased pressure found in obstruction causes absorption of toxins that would not pass through the wall of normal unobstructed intestine. Much of the material within a normal intestinal tract would be toxic if its absorption were forced by increased pressure, and this would account for many obstruction symptoms without using the theory of a special toxin formed under obstructive conditions. The absorption of the toxic material into the lymph or blood circulation is, of course, as important as the production of the toxin, whatever its origin may be. Following upon the numerous divergent theories regarding cause of death in obstruction come the reports of work by Foster and Hausler. They explain that in reporting any mortality rate in intestinal obstruction one must be specific in regard to the type of obstruction. According to them, an obstruction produced without necrosis as by a simple band results in a slow death and if dehydration be prevented it does not occur for many days unless the source of obstruction produces a peritonitis. On the other hand, in obstruction from a volvulus or from interference with the circulation of a considerable portion of the intestines death is rapid and gives the picture of shock. Naturally there is an intermediate zone between these two ex-

tremes. The work of these men is of great practical importance because it emphasizes the necessity of relieving a strangulation or an obstructed circulation of the bowel as promptly as possible. At about this time Haden and Orr stirred the medical world with their reports regarding blood changes in intestinal obstruction. They discovered that in obstruction of the upper intestinal tract the blood shows first a rapid fall in chloride and a rise in CO_2 combining power of the blood, and soon after this there is a rise in the non-protein and urea nitrogen. They believe that the fall of chlorids is not due to any great extent to loss of chlorids through the vomiting of gastric juice, but that it is related to the protein destruction. In obstruction at the ileo-cecal valve there is a rise in the blood nitrogen, but no change occurs in the chlorids. They recommend that in the toxemia of a high obstruction sodium chlorid be given in an initial dose of one gram per kilogram of body weight, and that the chlorids in the blood be watched carefully to estimate subsequent doses, which should be administered with a view to keeping the chlorids at their normal level.

Symptomatology: The symptoms of a typical case of acute intestinal obstruction are usually quite characteristic. The first symptom is practically always abdominal pain, so severe often as to cause the patient to cry out. It is sudden in onset and colicky in nature, and is intermittent. When the pain ceases the patient feels and may look normal, but it unexpectedly returns. As a rule after a day or two the pain becomes constant and frequently localizes to the seat of obstruction. If this fixed pain ceases it usually indicates the occurrence of gangrene. If the obstruction is high, vomiting is an early symptom. The vomiting is projectile in type usually without previous nausea. The reverse peristalsis at first empties the stomach of gastric juice, mucus and bile. If the obstruction continues and is high the upper intestinal contents appear next in the vomitus. If the obstruction is low, vomiting may not begin for hours or days. Of course, there are intermediate grades between high and low obstruction. The temperature may be subnormal or normal at first. If strangulation has occurred the pulse soon becomes rapid and weak and the patient is in a state of shock. Eventually the abdomen becomes tympanitic and distended. If the obstruction is not relieved the late symptoms begin to resemble those of peritonitis and death usually occurs within a week.

Diagnosis: The above symptoms if preceded by a history predisposing to obstruction and especially supported by the characteristic blood chemistry of high intestinal obstruction certainly would warrant a definite diagnosis. However, in differentiating peculiar types of obstruction which are not always typical we might consider the following outline to advantage:

In impaction of a foreign body the history fre-

quently would explain much. The intermittent character of the symptoms in such a case probably would come from the foreign body, for example a large gall stone, shifting its position within the lumen of the intestine.

In obstruction from peritoneal adhesions the history probably would include one or more attacks of peritonitis or an abdominal operation. In these cases the symptoms usually are severe with marked collapse. *Intussusception* is a type usually seen only in the very young, perhaps under two years of age. When found it usually is the result of violent peristalsis. Predisposing causes here might be intestinal parasites, polypi or enlarged mesenteric lymph nodes. A characteristic symptom in this type of obstruction is the constant desire to defecate, with the passage of blood and mucus from the rectum. In these cases it may be possible to recognize a sausage-shaped tumor in the right or left hypochondrium, the right iliac region being flattened, owing to the migration of the invaginated bowel along the course of ascending and transverse colon. When found this is called Dance's sign. Volvulus is a type usually found in adults, especially in the aged. Here the obstruction is due to twisting of the bowel around its mesentery.

Treatment: A table is attached to this article outlining some interesting facts concerning twenty-eight cases of acute intestinal obstruction which were operated by the surgical staff of the Indianapolis City Hospital. In this table the nature of the operative procedure in the different cases will be seen to be very important regarding the ultimate result. However, as a general guide we must follow certain rules of treatment if we expect the best results. The treatment should be prompt in every case of acute obstruction. As outlined earlier in this article there are essentially the two types of intestinal obstruction we must always keep in mind clinically when deciding upon methods of procedure in treatment, namely (1) simple obstruction and (2) obstruction plus strangulation. However, many cases cannot be placed in either classification before the abdomen is opened. If our past experience seems to tell us the case is one of very early simple obstruction, enemas may be tried. Purgatives should never be given. Turpentine stupes or moist applications to the abdomen possibly may help. However, when obstruction is marked beyond doubt then even such measures are not advisable. The stomach should be emptied by gastric lavage so as to evacuate the toxic materials regurgitated into it. Morphine is indicated to quiet peristalsis and relieve pain. If the diagnosis is made of definite obstruction then the case is surgical and nothing is gained by delay. The high mortality is due chiefly to delay and not to the condition of obstruction or to the operation. However, if the case is seen early enough the following procedure is in order:

To supply chlorids and relieve dehydration. For this purpose intravenous infusion of perhaps

500 cc. of ten-percent glucose in decinormal saline solution; one gm. of sodium chlorid per kilo of body weight may be given. Continuous hypodermoclysis with saline solution 300 to 600 cc. daily. Hydrochloric acid, salt, and ammonium chlorid by stomach; salt and ammonium chlorid by bowel; alternating lavage and aspiration by a Jutte duodenal tube introduced through the nose or mouth and left in place for hours or days.

The surgical procedure in these cases is selected always according to the condition of the patient and to the type of obstruction. Many of these cases come to the surgeon so late that a deliberate operation to remove the cause of obstruction would kill the patient whereas a simple high enterostomy would save him. In a typical case of acute intestinal obstruction with the patient in as good condition as can be expected, *i. e.*, without too much toxemia and minus excessive shock, the following routine procedure might be carried out with the idea of actually relieving the obstruction itself: Open the abdomen by a median or para median incision with the patient in the Trendelenburg position. The incision should afford room for expeditious manipulation. Provision should be made to guard against the gushing out of the intestines due to distention. Search should now be made for the site of obstruction if the condition of the patient permit and this should be done not haphazardly but systematically. The cecum, having a fixed position, makes a good landmark to begin the examination. If the cecum be distended, the obstruction is somewhere in the large intestine. If the cecum be collapsed, the obstruction is in the small intestine. Since the obstructed coil is found usually in the pelvis it is well to begin search in the pelvis, but if not found there then one may begin at the commencement of the jejunum and pass each loop through the fingers and back into the abdomen again until the cecum is reached again. Next the potential hernial openings are examined. Sometimes if the first empty coil of intestine is followed upward the blockage is reached. Certainly not as a rule but sometimes it is advisable to allow the coils of intestine to escape onto hot towels for a better examination. Sometimes the distention is so great that satisfactory progress cannot be made. In such cases it is well to evacuate the distended intestine by enterotomy. If the case is a desperate one and it is considered that the patient is unfit for more surgery, then the cause of the obstruction is not removed and the goal is one only to relieve the obstructed intestinal flow and its resultant toxemia. On the other hand, of course, the cause of obstruction may not even be considered removable. If the case was considered desperate from the outset the abdomen would have been opened by a limited incision without any attempt to examine the intraperitoneal region. Through the small opening made a coil of intestine generally will protrude and past experience has shown that this

TABULATION 28 OPERATED CASES

| INITIALS FE OR MALE COLOR DATE OF OP. AGE | DIAGNOSIS TYPE OF OBSTRUCTION | ETIOLOGY IF KNOWN | PREVIOUS LAPAROTOMY DATE AND KIND | HOURS OR DAYS OPERATED AFTER ONSET | CONDITION OF PATIENT ON ADMISSION | NATURE OF OPERATION | RESULTS |
|---|--|---|--|---|--|--|--|
| R. P. Male Colored Nov. 22, '27 31 | Volvulus | Volvulus. | None | 24 hours. | Poor. | Through a McBurney incision volvulus was reduced. | Cured. Left hospital in 15 days. |
| M. F. Female White Dec. 8, '27 76 | Simple type. | Adhesions from large dermoid cyst. | None | 1 week. | Poor. | Removed cyst and released adhesions. | Died in 24 hours. Apparently general exhaustion. |
| D. S. Male White Dec. 10, '27 28 | Early gangrene. | Adhesions. | Appendectomy 4 years ago. | 30 hours. | Poor. | Adhesions released. Enterostomy in doubtful gangrenous portion. | Cured. Left hospital in 20 days. |
| J. B. Female Colored Dec. 30, '27 18 | Simple type. | Postoperative adhesions. | Appendectomy Bilateral Salpingectomy Nov. 30, '27 | 24 hours. | Fair. | Released adhesion | After a stormy P. O. course left hospital apparently cured in 22 days. |
| C. R. Male White Jan. 14, '28 55 | Strangulated hernia with gangrene. | Right inguinal hernia. | None. | 48 hours. | Fair. | Resected gangrenous area and hernio-plasty. | Cured. Left hospital in 20 days. |
| A. J. Male White Feb. 18, '28 16 | Strangulated hernia without gangrene. | Right inguinal hernia. | None. | 15 hours. | Fair. | Hernio-plasty. | Cured. Left hospital in 17 days. |
| H. R. Male Colored April 3, '28 40 | Strangulated hernit without gangrene. | Right inguinal hernia. | None. | 24 hours. | Poor. | Hernio-plasty. | Cured. Left hospital in 16 days. |
| R. T. Female Colored April 23, '28 40 | Strangulated femoral hernia without gangrene. | Femoral hernia. | None. | 24 hours. | Fair. | Hernio-plasty. | Stormy course, but cured. Left hospital in 23 days. |
| O. M. Male Colored April 29, '28 44 | Strangulated inguinal hernia with gangrene. | Right inguinal hernia. | None. | 30 hours. | Very bad. | Intestinal resection. Anastomosis. | Died after 5 days with pneumonia. |
| F. W. Male Colored Nov. 11, '28 32 | Acute high intestinal obstruction. | Probably reflex from acute nephritis. | None. | 40 hours. | Very bad. | Jejunostomy. | Died in 24 hours without rallying. |
| I. S. Female White June 1, '28 50 | Strangulated hernia without gangrene. | Ventral P. O. hernia. | Appendectomy 3 years ago. | 20 hours. | Fair. | Hernio-plasty. | Obstruction relieved but hernia recurred in 5 months. |
| M. O. Female White June 22, '28 67 | Acute low intestinal obstruction without gangrene. | P. O. Adhesions. | Nephropexy in 1900. Uterine fibroid removed in 1914. | 4 days. | Fair. | Released adhesions and Cæcostomy. | After a slow recovery requiring 4 months, left hospital apparently cured. |
| A. T. Female Colored Aug 7, '28 35 | Acute high intestinal obstruction with gangrene. | P. O. Adhesions. | Pan-hysterectomy and Appendectomy June 7, '28 | 12 hours. | Poor. | Enterostomy in gangrenous bowel. | Following stormy course died after 3 days. |
| H. M. E. Male White Sept. 5, '28 49 | Strangulated femoral hernia with gangrenous omentum. | Femoral hernia. | None. | 6 hours. | Poor. | Resected gangrenous area and hernio-plasty. | Cured. Left hospital in 18 days. |
| A. K. Female White Oct. 4, '28 48 | Acute high intestinal obstruction with gangrene and perforation. | P. O. Adhesions. | Salpingectomy 15 years. | 7 days. | Very bad. | Enterostomy in gangrenous bowel. | Died after 20 hours. |
| C. H. Male White Sept. 15, '28 23 | Acute low Intestinal obstruction without gangrene. | Sarcoma of sigmoid. | Appendectomy in 1927. | 48 hours. | Fair. | Enterostomy. | Obstruction was relieved and mass was reduced by x-ray. Patient signed own release and left hospital after 18 days improved. |
| M. H. Female White Oct. 29, '28 30 | Acute high intestinal obstruction with gangrene. | Autopsy showed complete obstruction from adhesions. | None but radium treatment in cervix uteri. | 5 days. | Poor. | Not started. | Died while receiving anesthetic. |

TABULATION 28 OPERATED CASES—CONTINUED

| INITIALS FE OR MALE COLOR DATE OF OP. AGE | DIAGNOSIS TYPE OF OBSTRUCTION | ETIOLOGY IF KNOWN | PREVIOUS LAPAROTOMY DATE AND KIND | HOURS OR DAYS OPERATED AFTER ONSET | CONDITION OF PATIENT ON ADMISSION | NATURE OF OPERATION | RESULTS |
|---|---|--|--|---|--|---|---|
| G. B. Female White Nov. 2, '28 44 | Acute high intestinal obstruction without gangrene. | P. O. Adhesions. | Pan-hysterec- tomy Nov. 2, '27. | 24 hours. | Fair. | Released adhesion bands. | Cured. Left hospi- tal after 14 days. |
| P. S. Male Colored Oct. 21, '28 80 | Strangulated hernia without gangrene. | Right inguinal hernia. | None. | 15 hours. | Very bad. | Hernio-plasty. | Died after 3 days apparently with myocardial failure. |
| W. G. Female White Oct. 26, '28 31 | Acute high intestinal obstruction with gangrene. | P. O. Adhesions. | Salpingo and oophorectomy and appendectomy in 1924. | 4 days. | Very bad. | "Gun-barrel" enterostomy followed in 7 weeks by resec- tion and anastomosis. | Cured. Slow recov- ery in 2 months. |
| M. L. Male White Nov. 7, '28 47 | Strangulated hernia without gangrene. | Right inguinal hernia. | None. | 18 hours. | Fair. | Hernio-plasty. | Threatened with pneumonia but re- covered and left hospital cured in 3 weeks. |
| E. S. Female White Nov. 16, '28 18 | Acute low intestinal obstruction without gangrene. | P. O. Adhesions. | Right Salpingo oophorectomy for ruptured ectopic pregnancy in 1927. | 3 days. | Fair. | Released adhesion. | Cured. Left hospi- tal after 14 days. |
| M. R. Female Colored Dec. 5, '28 47 | Strangulated hernia without gangrene. | Right inguinal hernia. | None. | 2 days. | Fair. | Hernio-plasty. | Cured. Left hospi- tal after 16 days |
| G. G. Male White Dec. 28, '28 26 | Acute high intestinal obstruction with gangrene. | Femoral hernia. | None. | 18 hours. | Very bad. | "Gun-barrel" enterostomy. | Died after 12 days with general perit- onitis. |
| W. S. Male White Dec. 29, '28 72 | Strangulated hernia with gangrene. | Femoral hernia. | None. | 2 days. | Poor. | Intestinal resection. | Died after 3 days from pneumonia |
| A. R. G. Female White Dec. 2, '28 36 | Acute high intestinal obstruction with gangrene. | Adhesions but source unde- termined. | None. | 3 days. | Poor. | "Gun-barrel" en- terostomy follow- ed in 6 weeks by intestinal anasto- mosis. | Cured. |
| J. P. Male White Feb. 15, '29 47 | Acute high intestinal obstruction with gangrene. | Adhesions but source unde- termined. | None. | 4 days. | Very bad. | Jejunostomy. | Died after 24 hrs. |
| I. C. Male Colored Feb. 23, '29 46 | Acute high intestinal obstruction with gangrene. | Firm adhesions and kinking of ileum. | None. | 6 days. | Moribund. | None. | Died on admission. Autopsy showed multiple kinking of lower ileum, con- gestion of lungs and myocardial de- generation. |

loop of bowel is the best one to select for enterostomy. For immediate relief, after making provision to prevent soiling, the loop of intestine is now incised and a flanged glass tube inserted (to the outer end of which a rubber tube has been attached) into the lumen of each limb of bowel. The purse string suture around the point of incision is now tied and closed around the tube. Sometimes the convexity of the loop of intestine is anchored in the margins of the abdominal wound with the peritoneum sutured everywhere about it and after several hours opened within an area surrounded by a purse-string suture which then ties the intestinal wall around the flange of the inserted tube. If general peritonitis is not already present when the case is seen then there is a chance for even the desperate cases. The advanced cases withstand general anæsthesia badly and should be subjected to the least amount

of operative trauma. The question now arises whether or not an intestinal anastomosis should be undertaken. Some surgeons consider the loss of intestinal juices in a drainage of proximal and distal ends of gut more harmful than the risk of an anastomosis. However, in the presence of a great distention of the bowel it is exceedingly dangerous to do an anastomosis. The semi-necrotic tissues are difficult to suture and the fresh surfaces opened invite rapid absorption of toxic material. The fact must not be overlooked that difficult surgery invites more initial shock and all our efforts have been to relieve the toxemia which is allied closely to shock itself. If a gangrenous loop is found it may be excised and a "gun-barrel" enterostomy performed. After the patient has recovered an intestinal anastomosis can be established with safety.

A study of this series of cases discloses a few interesting statistics, as follows:

1. Forty-three percent had herniæ as an etiological factor.

2. Thirty-five percent had had some previous laparotomy. Admitting the possibility of another etiological factor, it is probably safe to assume that the previous surgery had a definite role in most of the thirty-five percent. In these cases the previous surgery was mainly pelvic surgery.

3. Sixty and two-thirds percent recovered. Thirty-nine and one-third percent died.

4. Four of the cases included in the series were extremely old people and a number of the remaining cases were not seen until very far advanced. In this connection it is well again to emphasize the factor of delay as an important cause of death in acute high intestinal obstruction.

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CORONARY SCLEROSIS VERSUS ACCIDENTAL INJURY IN SUDDEN DEATH

(Report of a Case in Legal Medicine)

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"The anatomic viewpoint therefore is quite insufficient, and the changes which are demonstrated in cadavers after death give characteristics for the recognition and classification of diseases rather than lesions capable of explaining death."—CLAUDE BERNARD.

The clinician, in cases in which death comes on slowly, is afforded an opportunity for observation and study. From the information secured he usually can arrive at an opinion in regard to the cause of death and can deduce the anatomic derangements involved. In sudden death, however, conditions are frequently different. No one, at least no trained medical observer, may be present to watch the rapid play of pathologic-physiologic happenings, or, if such an observer be present, the death is so unexpected that he is taken unaware and unprepared. His exactitude of observa-

tion is warped by emotion, and the tempo of the mortal change is so rapid that he can do nothing except catch by his unaided senses the most gross phenomena. Recourse to the securing of data by methods of instrumental precision and laboratory investigation is denied him. Furthermore, it is his duty in such emergency to assist a dying man, not to study death. Under such circumstances other means of collecting information must be employed, if the statement of the cause of death is to be anything more than a mere guess, however shrewd. It is here that reliance is placed especially on the postmortem examination, and generally the help that is desired is forthcoming. But there are cases in which the evidence secured at necropsy is insufficient and not convincing. The anatomic changes, though clear cut, are only the substratum on which the tragic drama of the passing of life plays itself; they are no different just after death than they were minutes, days, or weeks previously. In the determination of the cause of death, these findings merely can be added to whatever other information is available. The environmental circumstances attending the death may be illuminating, but there are still instances in which the exact statement of the cause of death cannot be made.

Frequently the accurate determination of the cause of sudden death (omitting here all questions of vital statistics) has only medical interest. The family is concerned solely with its bereavement. It is left to the medical attendant to ponder and to seek to understand. Yet at times this question becomes of acute interest to the family as well. This is more often true since the passage of workmen's compensation laws, and the general buying of accident insurance. Payment or non-payment of claims may rest entirely upon the establishing of the occurrence of death from personal injury or from disease processes. It is this legal aspect of sudden death that I propose to discuss, using as a basis a concrete case (Claim No. 15130 Industrial Board of Indiana) which presents many of the questions involved.

Case Report: A man, fifty-five years of age, employed at a grain elevator, was found dead on November 5, 1928, at the bottom of a corn bin. His body was wedged tightly under a headgate, whither evidently it had been transported by a drag-chain used to carry away the corn as it was dumped. It was considered that he fell accidentally into the bin and that he died of the injuries received. The coroner reported the death as accidental, and the body was buried. However, the case came under the workmen's compensation act, and the insurance company on investigation found that the deceased had had heart disease. It was requested that the body be exhumed for the purpose of a necropsy. This examination was held on November 23, 1928, eighteen days after death.

The body was that of a well-built man, weighing 180 pounds. Extensive abrasions were present

on the tibial surfaces of the legs together with a large area of contusion in the left calf. There was a scalp wound in the left parieto-occipital region one and one-half inches long, with contusion and discoloration of the surrounding tissues. The skull was very thick and showed no fracture. There was no extradural or subdural hemorrhage, and no contusions or petechial hemorrhages were demonstrated in the brain. The arteries of the circle of Willis were sclerotic. The right fifth rib was fractured one cm. external to the costochondral junction without hemorrhage into the surrounding tissues or pleural cavity. The lungs were emphysematous in their anterior portions, but were otherwise normal. The heart was enlarged. The mitral leaflets showed diffuse sclerosis with several patches of atheroma, and the aortic semilunar valves were thickened at the base with moderate calcification. The aorta itself was slightly sclerotic in the first portion, but normal in the arch. The coronary arteries, on the contrary, were the seat of marked sclerosis; they were brittle and their lumina narrowed. There was no coronary thrombosis and no degeneration or fibrosis in the myocardium to indicate infarction, recent or old. The abdominal viscera were normal. The stomach was filled with undigested food.

The important findings at necropsy, therefore, were those of minor trauma (abrasions, scalp wound, fracture of rib) and coronary sclerosis. In the absence of unquestionable evidence of marked injury, the insurance company considered that death was caused by heart disease, and refused payment. The widow sued.

At the trial it was brought out that the deceased had been ill in November, 1927, at which time he was in bed for ten days, and was confined to his home for four weeks. He had shortness of breath, swelling of the lower extremities, and a cardiac murmur. His physician made a diagnosis of myocarditis. He had not been under further medical treatment, and during the year following had made no complaint to his employer. The day of his death he had been home to dinner as usual and had eaten a very hearty meal. He had conversed with several persons and appeared well. He was last seen one-half to one hour before he was found dead.

It had been a customary part of his duties to dump corn into the bin in which he was found. This bin can be visualized best from the accompanying diagram. The opening in the floor of the elevator was thirty-nine inches long and eighteen and one-half inches wide, and was divided into halves by a small bar. Beneath this was the bin, the bottom of which was about ten feet below the floor of the elevator. Extending across the middle of the bin directly below the opening was an inverted trough six by six inches. The floor of the bin was v-shaped, slanting downward from each side to a groove three or four feet directly below the transverse inverted trough; in this

groove was a chain and lugs, the chain being operated so that it could pull corn out of the bin under an adjustable headgate to be dumped later into a corn carrier and elevator.

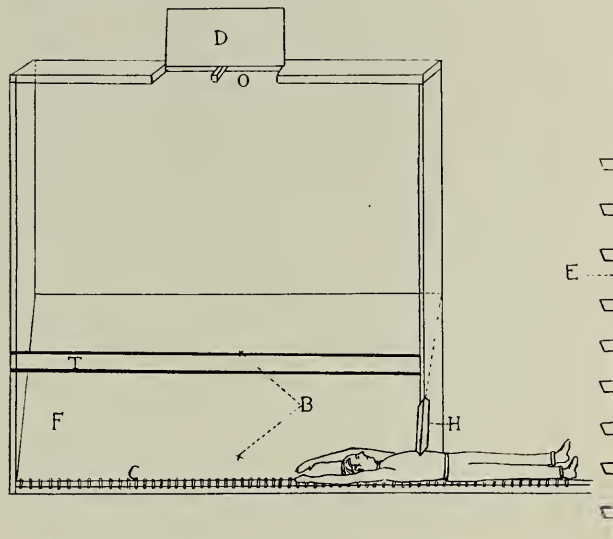


DIAGRAM OF CROSS-SECTION OF BIN SHOWING POSITION OF BODY.

O, opening in floor of elevator; D, trap door; T, inverted trough; F, slanting floor of bin; C, drag-chain conveyor; B, locations where blood was found; H, headgate; E, corn carrier and elevator.

Often ears of corn became caught and would not be fed along properly by the moving chain, making it necessary to dislodge them. The deceased had an eleven-foot pole which he was in the habit of using for this purpose. This pole was found in the bin. The body itself lay at the bottom of the bin, so that from the opening in the elevator floor, the head, arms, neck, and upper part of the chest could be seen; the headgate was firmly down on the mid-portion of the chest; the rest of the body was visible only from the bottom of the elevator where it lay in the trough leading to the corn carrier and elevator. There was a considerable amount of blood on the inverted trough and on the floor of the bin beneath it. The body was extricated with the greatest difficulty. It was necessary to pry loose the headgate in order to free the chest, which was wedged very tightly underneath it. The body was warm and, as testified to by the physician who had been summoned immediately, pale and not cyanotic.

The view of the insurance company was that the man dropped dead, fell into the bin, and that his body was carried by the conveyor until stuck underneath the headgate. It was maintained that any living man would have made an effort to save himself by grasping the bar at the opening, the inverted trough, or the conveyor; and yet there were no wounds on this man's hands. The scalp wound without fracture of the skull or injury to meninges or brain, and the fracture of the rib without hemorrhage into the pleura or damage to the lung, were minor injuries and insufficient to cause death. On the other hand, the previous history of cardiac disturbance diagnosed as myocarditis was in line with the marked coronary

sclerosis found at necropsy, and this sclerosis furnished adequate explanation for sudden death.

The counsel for the widow contended that the finding of coronary sclerosis without the establishment of an angina pectoris or coronary thrombosis with infarction or heart rupture was not sufficient as an explanation of sudden death in this case. They maintained that while stooping or kneeling to dislodge corn with his pole the man fell or was pulled into the pit and struck his head on the inverted trough with resultant loss of consciousness. Under such circumstances he would have been unable to help himself. The blow to his head with concussion, and the marked compression of his chest with respiratory and cardiac embarrassment when his heart muscle already had been weakened by coronary sclerosis, were sufficient to explain death.

The court found that the man "died as the proximate result of a personal injury received by reason of an accident arising out of and in the course of his employment by the defendant."

Comment: It is evident that the chief cause of death in this case cannot be given with certainty. The conclusion arrived at will be merely an expression of opinion.

Since the time of Bichat, the head, the lungs, and the heart have been considered the portals of entry of death, the *atria mortis*. A head-death, a lung-death, and a heart-death are thus spoken of depending upon the part of the body in which the mortal change is initiated. This division, of loose terminology and incomplete though it be, nevertheless is of great practical value as a basis for discussion of cases such as the one under consideration, for death can be traced ultimately to failure of the functions of the medullary centers, of respiration, and of circulation. These functions are so interwoven that primary failure starting in any one of the three soon brings inevitable failure in the other two. Through which portal of entry, then, did death come in this case, the head, the lungs, or the heart?

Head-death: The deceased had a scalp wound in the left occipital region. In viewing the pit into which he fell, it seems that he must have struck his head on the sharp corner of the large inverted trough, seven feet from the opening. Blood was found on this beam and beneath it. A head-death from trauma generally results from fracture of the skull with contusion or laceration of the brain. In this case no fracture was present, and no injury to the brain was demonstrable. If death occurred from injury to the head, it must have been from concussion. There is much confusion in the use of this term. I am employing it in the restricted clinical, physiologic sense used by Miller.⁵ "The term concussion should be used to indicate a group of symptoms which are the result of a temporary inhibition of cortical function with or without stimulation or inhibition of one or more of the medullary centers, but which

are not accompanied by pathologic lesions." The disturbances of concussion are generalized and immediate, and they tend to rapid and spontaneous recovery leaving no trace. Concussion can cause sudden death, but such deaths are rare. It seems improbable that it could have been the most important factor in this case. Experience is entirely in favor of the view that if this man received a blow to the head of sufficient severity to cause death, fracture of the skull and gross lesions of the brain would have been found. Yet it is probable that, if alive when he fell, he at least was rendered unconscious by the blow.

Whether the wound on the head was incurred before or after death does not admit of definite answer. The scalp is so vascular it could give some blood postmortem. The surrounding extravasation and the amount of blood on the inverted trough and on the floor of the bin were in favor of a wound bleeding before death. However, concerning the important question whether blood was found also at the outlet of the bin where the body lay, nothing was said at the trial. We may presume that had blood in any large quantity been present in this location, it would have been mentioned. Its absence would indicate that life at the most did not persist any considerable length of time after the body came to its final position.

Lung-death: The body was found wedged tightly under the headgate, as shown in the figure. Could there have been such respiratory embarrassment from compression of the chest that asphyxiation ensued? It was asserted that the body was pale and not cyanotic. Yet in the depths of an elevator with poor light, cyanosis might have been overlooked. The abdomen was free and diaphragmatic breathing not interfered with except by the well-filled stomach. Had the abdomen also been compressed, traumatic asphyxiation might have occurred with its unmistakable discoloration of face, neck, and upper chest. Hence it is probable that asphyxia, like concussion, was not the chief or sole factor in the causation of death. Still it seems evident that a considerable degree of respiratory embarrassment from compression of the chest must have occurred.

Did the fracture of the rib occur before or after death? Fracture of the rib results either from a direct blow or from compression. If the fracture occurred when the body struck the smooth slanting floor of the bin, it is likely that more than one rib would have been broken, and that contusion of the chest wall would have occurred. It is more probable that the fracture was one of compression by the pressure of the narrow headgate. The absence of notable extravasation would not mean necessarily that the fracture was a postmortem one. Such fractures are often subperiosteal; the intercostal arteries are not injured; and bleeding is minimal. Displacement is slight due to the splinting action of contiguous ribs. Little bruising of the overlying tissues takes place, since the

rib being elastic gives before the force, and there is no such pinching of the tissues as occurs in impingement against a rigid background.

Heart-death: Lesions of the heart and of the aorta constitute the chief anatomic bases for sudden death. This man had a marked coronary sclerosis. He did not have a coronary thrombosis or embolism, nor did he have a heart rupture. These conditions would have substantiated the contention of the insurance company that death was due to disease. Did this coronary sclerosis constitute the sole cause of death? Was it merely an incidental finding? Or was it the cause of heart failure in an organism suddenly subjected to trauma?

The consideration of these questions is difficult, for there is great confusion of ideas in regard to the subjects of coronary sclerosis and angina pectoris, and their relationship to each other and to sudden death. Patients with coronary sclerosis, according to Willius,⁷ can be divided into three clinical groups: (1) those with paroxysmal cardiac pain—angina pectoris, forty percent; (2) those with myocardial failure, fifty percent; and (3) those with paroxysmal dyspnoea—cardiac asthma, ten percent. Besides these, there is coronary sclerosis without symptoms. In these latent or occult cases the sclerosis is not so extreme, and is merely an incidental finding in patients with other disease processes. The coronary sclerosis in this man was not symptomless; a year before death there had been dyspnoea, edema of the lower extremities, and a cardiac murmur. The clinical picture was that of cardiac decompensation from myocardial failure (group 2 of Willius⁷). Such cases, unless anginal attacks later become superimposed, usually die of congestive heart failure. This man must have had coronary sclerosis at least a year before death. He apparently made a good recovery. Possibly this recovery can be explained by an improvement in the blood supply to the heart such as can occur by the formation of anastomoses in cases of gradual coronary occlusion as shown by Oberhelman and Lecount.⁶

If this man died suddenly from coronary sclerosis, how did it occur? Did he have an anginal attack? What is the mechanism of sudden death in coronary sclerosis? That persons die suddenly in attacks of angina pectoris is without question. That many persons dying of angina show at necropsy sclerosis of the coronary arteries is likewise unquestioned. But not all patients dying of angina have coronary sclerosis, and not all cases of coronary sclerosis have or die of angina. The one is a clinical disease picture, the other a pathologic entity. Yet in any sudden death in which coronary sclerosis is the outstanding lesion, the possibility of an anginal attack being the factor precipitating death must be entertained. In this case there had been no attacks of precordial pain. Did an angina occur with death in the first attack? The majority of patients dying in a first attack

are found on investigation to have had coronary thrombosis or embolism. From these considerations the probability of an anginal attack as the cause of this death seems small.

How can rigid calcified walls and narrow lumina in coronary arteries cause sudden death—walls which are no different from what they were an instant, a day, or weeks before? How do such vessels at one instant deliver an adequate circulation and at another not? There must be an added factor. In coronary thrombosis and embolism this factor is clear. But what is it in cases like the present? Spasm of vessels which are incompressible from thickening and hardening of the walls by deposits of lime, seems to me impossible. Does pain occur with stoppage of the heart by reflex vagal inhibition, as has been taught by some cardiologists⁴ in explaining death from angina? Or does acute cardiac dilatation, as thought by the pathologist who testified in this case, supervene in a heart muscle weakened and degenerated by ischemia? If the latter, what is the factor precipitating such a dilatation?

These and other theories for the explanation of sudden death in cases of coronary sclerosis are less attractive to me than that of ventricular fibrillation.³ It is known that death appears practically instantaneously with the onset of this rhythm. If we accept this viewpoint we can consider anoxemia of the heart muscle as the factor predisposing the ventricles to fibrillation, and we can consider some external stimulus, often slight, unknown, and insufficient to initiate mortal changes in a well-oxygenated heart, as the added factor precipitating the abnormal rhythm incompatible with life. But regardless of what the cause of sudden death in coronary sclerosis is, whether it be of nervous, muscular or vascular origin, in the last analysis it is functional and not anatomic.

Since we cannot be sure concerning the cause of death in this case, we must choose that alternative which seems the more probable. Did this man's heart suddenly fail him, either as the result of added exertion or of some unknown precipitating factor occurring merely as a coincidence at the time he stood over the bin, or did he fall accidentally into the bin, suffer concussion, respiratory embarrassment and possible shock, and then have his heart fail him? The strain, it seems to me, would be unquestionably greater in the latter instance, and the factors precipitating inadequate cardiac function less hazy. On the one hand, the death would be classed as due to disease and not compensable; on the other, as due to accidental injury and compensable. The difference from the medical standpoint would be merely that between a primary and a secondary heart failure, so-called. The judge who tried the case seemingly was more impressed by the fact that the deceased evidently had been using a pole to disengage the corn than he was by the subtleties of medical argument. The pole was not long enough

to permit anyone using it to stand erect. While kneeling or bending over, if the pole should have been caught in the drag-chain, the victim easily might have been precipitated head first into the bin and would have been unable to save himself. Guided by these considerations and the absence of incontrovertible medical evidence, his verdict of death from accidental injury appears justifiable.

The viewpoint of morbid anatomy alone is insufficient for an adequate study of these problems. Death is a physiologic phenomenon and an integral part of life. In many instances no single factor or organ can be incriminated; the cessation of function is caused by the combined effect of many factors without any of which death might not have occurred. Often the determining and precipitating factor is so minor that it escapes notice, and the cause of death is termed unknown. Furthermore, in any consideration of death, the human organism cannot be separated from its environment; they are one, and any adequate explanation of death must take into account the mutual reactions of one on the other.

The finding at necropsy in medico-legal cases of certain types of lesions of the heart, of which coronary sclerosis is one, is not tantamount to the establishment of a cardiac death in the sense that they are either solely or primarily the factors leading to death. Though they are compatible with, they are not necessarily causative of sudden death. They are chronic in nature and have been present for some time; they do not change suddenly—they but weigh the scale which something else tips. For the establishment of their primary role in the causation of death, it is necessary to show that they have been accompanied by physiologic changes known to be incompatible with life.

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BETTER BUSINESS METHODS

A. G. W. CHILDS, M.D.

MADISON

In every branch of science or industry in which man is engaged progress is the keynote, the vital element that keeps the heart of man's activities pulsating. Medical science has kept pace with the world's progress in its scientific achievements and its ability to serve the public, but it has lagged far behind other lines of activity in adopting and putting into effect business methods.

Men are not in the habit of doing things today merely because their forefathers did them. They

usually prefer modern to antiquated methods, and take their profit wisely in new inventions and discoveries. The medical profession is the only group which persists in following an antediluvian code of ethics and of business procedure. No other profession renders service without adequate payment, nor without being secured against imposition. The lawyer is sure of his fee, even if he knows the client, and even if he knows that the client is in good financial standing he will get his retainer in advance. The architect, the engineer, the accountant, the dentist, the veterinarian, are never expected, as physicians so often are, to contribute their time and their skill without any compensation at all. Our patients, most of whom are in the commercial field, look upon our methods as antiquated and foolish. Why should so many practitioners persist in remaining behind the times? We do not limit our science to the standards of the eighteenth century, so why should we limit our ethics and business transactions to that period? We must keep pace with the general advance if we would serve our generation and ourselves efficiently.

The complexities of modern life place many and sometimes burdensome obligations upon us all. The cost of clothing, food, shelter, education, and the cost of our obligations to our community, such as contributions to churches, welfare work, civic improvement, etc., and even the cost of dying have all so advanced that it behooves us to pay some attention to the almighty dollar. The physician, with a necessarily high standard of living consequent upon his position in his community, must assume such obligations, and, needless to add, meet them with promptness. Those people who supply his needs insist upon settlement, and there is nothing quite so hang-dog looking as the delinquent physician chased from pillar to post by bill collectors. Self-respect is gone, and when that is gone the respect of the community is endangered seriously. If the physician must meet his obligations promptly, why should he not be privileged to request prompt payment from his clients? No practice is profitable that does not permit you to live and put a little aside for the rainy day or for old age.

From the business standpoint patients naturally divide themselves into two general classes—those who pay and those who do not pay. With the first class we are not concerned in this discussion, except to say, "God bless them!" They are the people who save the day for us doctors who ordinarily are poor business men. Bank account is overdrawn. What shall I do? Here's Mr. Jones. He will pay if I ask him. Request is made, check is written, credit is saved at the bank. With the money from this class we pay our rent, buy our books and journals, pay for drugs and equipment, buy gasoline, and pay the butcher, the baker, and the candlestick-maker. By this time the money is all gone. Expenses are all paid, but we have no profit left.

Now as to the second class, the non-paying patient, who is he and how does he conduct himself? Did it ever occur to you that the physician's profit is in the hands of the non-paying patient, and that all the money he has belonging to you is all profit? Your overhead expense is paid, which includes the expense of making the money you have not collected, and every dollar you get from the non-paying patient is clear except for the cost of collecting. Of course, we all have among our patients those who are too poor to pay the regular fee. As the good book says, "The poor we have with us always." There are very few, however, who cannot pay something. In fact, the poor patient would maintain his self-respect if he were to pay enough at least to cover the actual cost of his treatment. The handling of this class of patients must be left to the discretion of the individual doctor, who should call in the assistance of the township trustee whenever the treatment is to be long and expensive.

The client with whom we are most concerned, the one who is robbing us of the cream of our income, who is making it impossible for us to have that much-needed vacation and who prevents our families from enjoying some of the luxuries of life, is the one who is not going to pay unless pressure is brought to bear, and that pressure is the point of this discussion. All people expect to pay their bills except a very small percentage who are either dishonest or are so far down and out that they know beforehand that they never will be able to pay. With this small number all business men have to deal, and they usually figure on enough loss to cover the "down-and-outers."

The patients who do not pay may be classified as follows: First, money does not reach—when pay-day comes there is not money enough to meet the demands. The grocer and butcher have sent their bills. The house rent must be paid. Statements have been received from the telephone, electric light and gas offices. The doctor is not pushing, so his bill may slide and it continues to slide indefinitely. Second, the self-pity class. This patient is inclined to exaggerate his poverty until he has persuaded himself that he is too poor to pay the doctor, so he drops the doctor he owes and employs another. Third, the "staller" or possibly the "baiter." He promises and his wife promises: "Now on the first of each month we are going to pay five or ten dollars until the whole bill is paid." But except for an occasional bait the bill remains unpaid.

We might classify others as the indifferent class, the neglectful class, and, finally, a class who feel that the bill is unjust, but with any or all of these classes the difficulty would be avoided largely by a systematic business-like effort to collect on the part of the physician.

It is an established fact that the debtor who is allowed to go too long without settlement, and who gets in too deep, is likely to be lost. Merchants have found that such a customer will turn

away from their stores and pay cash to a competitor to whom he owes nothing. If you collect carefully and systematically your client has a healthy attitude toward you. He respects your business ability, and he is not discouraged by a mounting bill. We all know how bills do pile up and become unexpected mountains of debt. The careless collector defeats and dissipates the expectation to pay. Naturally the debtor feels that if the creditor is indifferent to the matter of payment "he should worry." Do not add to your collection difficulties by neglecting so important an obligation to yourself and your family.

In every community there is a certain amount of money circulating for the payment of debts. It goes from hand to hand, decreased a little here, augmented a little there, but always moving. If you do not arrange to have it stop at your office on its rounds—well, it's just too bad. Perhaps you cannot get all the results you would like, but who does? In proportion as your efforts are made earnestly you will find reward.

The successful handling of this important matter depends upon two things, persistence and co-operation. Persistence of the individual physician will bring results, but not perfect results. For example, if I push collections systematically, as any business man would do, I succeed in ridding my own books of a large percentage of bad accounts, but the patient who does not want to pay me simply gets from under my bill by employing another doctor who will not molest him about the mere matter of money. If, on the other hand, he finds that there is cooperation on the part of all of the doctors, that all of us are doing the same to him as I did, it will soon change him from the dishonest bill-dodger to an honest man who always pays his bills. Therefore, may I make this final appeal to all the members of our organization and any others who are interested that we make a systematic, persistent, cooperative effort to solve this problem of collections.

The constitution and by-laws of the Physicians' Credit Association of Madison and vicinity are as follows:

ARTICLE I.

NAME OF THE ASSOCIATION

The name of this organization shall be the Physicians' Credit Association of Madison and Vicinity.

ARTICLE II.

PURPOSE OF THE ASSOCIATION

The purpose of the organization is:

First: To foster and encourage cooperation in the matter of charges and collections.

Second: To establish a credit rating of the clientele of the physicians of this community.

Third: To establish a central collecting office for the handling of bad accounts.

ARTICLE III.

MEMBERSHIP

The membership of this organization shall consist of all physicians of Madison and vicinity who are in good professional standing.

ARTICLE IV.

MEETINGS

The meetings of the Executive Committee shall be held each month and a report of the progress of the organ-

ization shall be made to the Association at each regular meeting.

A special meeting of the entire Association will be called whenever deemed advisable by the Executive Committee or by any three members of the Association.

ARTICLE V.

OFFICERS

The officers shall consist of President, Vice-president, and Secretary, who shall be elected by the Association and shall serve for a period of one year.

ARTICLE VI.

DUTIES OF OFFICERS

The officers shall constitute the Executive Committee of the Association.

The President shall preside at all meetings of the Executive Committee and call-meetings of the Association. The Vice-president shall perform the duties of the President in his absence. The Secretary shall keep a record of the proceedings of the Executive Committee and make written reports each month to the Physicians' Credit Association. The President, Vice-president, and Secretary shall share and cooperate in the performance of the general duties of the Executive Committee, which are as follows:

First: To keep before the Association the schedule of prices which has been adopted and to recommend changes when advisable; also to recommend and assist in establishing business-like methods for the collecting of accounts.

Second: To select and instruct a clerk who, under the direction of the Executive Committee, shall establish both the credit rating and the central office referred to in Article II.

RECOMMENDATIONS

First: That regular monthly statements shall be sent to all debtors as is the custom of all business organizations.

Second: That if no response is received to the third statement, there shall be sent the following series of collecting letters: No. 1, No. 2 and No. 3, at intervals of ten-fifteen days.

Third: When no response is received to the third letter, the account should be turned in to the central office for collection.

Further Recommendations: That the duties of clerk shall be as follows:

First: That a delinquent list shall be compiled and furnished to each physician, specifying the amount and number of physicians to whom the delinquent is indebted. This list shall be made up from the lists sent in by members of the Association. This list shall be revised as often as is deemed necessary by the Executive Committee.

Second: That bad accounts turned in to the central office by members of the Association shall be collected by the clerk, who shall make use of all available and legitimate methods.

Third: The compensation for the duties of clerk shall be fifty cents or more per month from each member, and twenty-five percent of all accounts collected.

The letters recommended to be sent to debtors are as follows:

LETTER No. 1.

PHYSICIANS' CREDIT ASSOCIATION (Members' names given.)

Dear Sir:

Your account of \$..... is long past due. You no doubt have overlooked the settlement of this obligation, so I am sending you this reminder in the hope that I may receive a check to cover the same by return mail.

Thanking you in advance, I am,
Respectfully,

....., M.D.

LETTER No. 2.

PHYSICIANS' CREDIT ASSOCIATION (Members' names given.)

Dear Sir:

Having received no reply to my request of the

I conclude that you have some very good reason for not at least replying as a courtesy.

If I do not hear from you very soon I shall consider that you do not intend to settle this account.

I still feel that you have overlooked this matter and that a check will be forthcoming.

Respectfully,

....., M.D.

LETTER No. 3.

PHYSICIANS' CREDIT ASSOCIATION (Members' names given.)

Dear Sir:

Having heard nothing from you since I last wrote you concerning the account you owe me makes it necessary that I use more imperative means to impress upon your mind that this bill must be paid.

If I do not receive payment on the account within ten days I shall be compelled to turn the account in to the Physicians' Credit Association of Jefferson County.

While this in no sense will bar any member of the association from serving you or your family, it will have a tendency to cause them to be less anxious to do so unless you pay them cash.

You cannot afford to have your name appear on the records of this organization, as it may cause you much inconvenience.

Therefore, it behooves you to make some satisfactory arrangement about it, or, better still, send in a check for the amount.

Respectfully,

....., M.D.

IRRITABLE BLADDER IN WOMEN*

JOHN W. VISHER, M.D.

EVANSVILLE

In this paper I will discuss briefly the most important causes of bladder symptoms which are peculiar to the female sex. Diseases of the kidneys, ureters and bladder, which often cause bladder symptoms but are present in both sexes, will be enumerated but not discussed. The most important are urinary tuberculosis, pyelitis, ureteritis, ureteral strictures, renal, ureteral and vesical calculi, bladder neoplasms and diverticuli. Neurological causes of bladder symptoms, such as multiple sclerosis, tabes, and hysteria also occur in men as well as in women. Gonorrhea is, of course, important in both sexes, but will not be discussed in this paper.

The bladder lies in close proximity to the female organs, and is supported by the same muscles and fascia, drained by the same lymphatics, and supplied by the same nerves and blood vessels, so that infections, malpositions and new growths of the former are prone to affect the latter.

The most common lesion causing bladder irritability in women is nonspecific urethritis with complicating trigonitis and cystitis. This form of urethritis is very uncommon in men. I believe the reason for this is that the female urethra is short and its external opening is bathed continuously with vaginal secretion more or less contaminated with fecal bacteria. It is well known that cystitis and pyelitis are much more common in girls than in boys, and the colon bacillus is

*Read before the Vanderburgh County Medical Society, March 11, 1930.

usually the offending organism. Cervical lesions are so common in adults that a non-purulent vaginal secretion is exceptional, and so the urethra in the female is exposed continuously to pus-producing bacteria, and it is surprising that urethral infections are not even more common.

Another lesion found more frequently in women than men is a small urethral meatus. Perhaps this helps to prevent ascending infection, but once vesicle infection has occurred free drainage is essential for rapid recovery.

True urethral caruncles and prolapsed urethral mucous membranes are common, especially in elderly women, and cause severe bladder symptoms and local pain and tenderness.

A cystocele, whether or not there is residual urine, may give rise to bladder irritability and cystitis. Women who have had uterine fixation operations, and especially those who have had hysterectomy, are also prone to have bladder symptoms with or without cystitis. The uterus forms part of the pelvic floor, and after its removal the abdominal contents press the bladder downward upon the anterior vaginal wall, causing urinary frequency and bladder discomfort, especially after the patient has been on her feet a long time.

Uterine malpositions, such as prolapse and extreme retroversion, also may cause bladder symptoms. It is well known that pregnancy, uterine tumors and pelvic masses influence the bladder, either by pressing upon it from above or interfering with its complete emptying. Pelvic infections often cause cystitis, either by extension through the lymphatics, or by ascending infection from purulent vaginal discharge. Cervical infection not infrequently causes urinary frequency, even in the absence of cystitis. I believe this is due to reflex vesical spasticity, similar to the urinary frequency which almost constantly accompanies anal lesions.

Focal infection anywhere in the body may cause bladder pathology, either directly or by keeping up a chronic pyelitis. It should be searched for and treated in every patient regardless of her complaint.

In arriving at a diagnosis the first step is a careful history followed by a general physical examination and a careful inspection of the external genitals and cervix. A bimanual examination always should be made in the horizontal position, and also, in selected cases, in the vertical position. Cystoceles and uterine prolapses and malpositions can be recognized and their importance evaluated better with the patient standing. A catheterized specimen of urine should be obtained, centrifuged and examined microscopically for pus, blood, bacteria and epithelial cells. The latter may be the only formed elements found, which usually indicates a mild degree of infection.

The urethra should be calibrated by bulb-tipped bougies, followed, if necessary, by meatot-

omy and urethral dilation to size 27, French. Caruncles and prolapsed mucous membranes should be treated by fulguration, or excision followed by cauterization of the base. Care should be taken not to treat them too vigorously, as painful scars or urethral strictures may result. The very small lesions may be treated successfully with silver nitrate. Skene's glands and Bartholin's glands should be examined and treated. Infection of both usually is gonorrheal in origin.

Cervical lacerations, erosions and infections should be treated by daily topical applications of four-percent mercurochrome in the milder cases and by cauterization or surgery in the more severe cases. Cystoceles, uterine malpositions and fibroids should be treated by conservative operative procedures. After such operations the bladder should be irrigated daily with warm one to five hundred mercurochrome solution for a week or two or until any cystitis or urethritis which may co-exist has disappeared.

In conclusion I would express as my opinion that in women bladder irritability more frequently results from lesions in the lower urinary and the genital tract than it does from renal and ureteral disease. Furthermore, not infrequently infections ascend to the kidneys from the bladder, so that correction of the lesions discussed in this paper is an important means of preventing pyelitis and pyelonephritis.

SPECIAL ARTICLE

DIPHTHERIA DEATHS FOR
JUNE, 1930

We have good news to report for the month of June. There were but three deaths—the lowest month for the year. The State Board of Health reports that the number of cases reported for the month was forty-three and further remarks that this is the least number of cases reported for any one month in the past seven years.

In this connection it may be of interest to know which counties have been guilty of spoiling what might have been a perfect record:

| County | Cases | County | Cases |
|-------------|-------|------------|-------|
| Allen | 5 | Noble | 1 |
| Bartholomew | 1 | Posey | 1 |
| Dubois | 2 | Ripley | 1 |
| Fountain | 1 | Rush | 1 |
| Gibson | 3 | St. Joseph | 9 |
| Jackson | 1 | Tippecanoe | 3 |
| Lake | 7 | Wabash | 1 |
| Madison | 2 | Warren | 2 |
| Marion | 2 | | |
| | | | 43 |

It will be noted that there are certain foci in which the disease is more prevalent: (1) The larger cities of the northern section; (2) the counties in the "pocket"; (3) another focus in the upper Wabash Valley. Marion county has made an excellent record in recent months, if one considers its size. In making the above list of counties

the writer is keenly aware of the probability that several other counties would have been listed if all cases had been reported.

In reporting the deaths that occurred one more new county is added to the black list (Gibson). The present writer commented a couple of months ago on the number of deaths in the row of counties from Terre Haute to Evansville (Vigo, Sullivan, Knox, Gibson and Vanderburgh) and predicted that Gibson should be on its guard.

Diphtheria deaths by counties for June and the first six months of the year:

| County | Total | June | County | Total | June |
|----------|-------|------|-------------|-------|------|
| Allen | 1 | 0 | Monroe | 3 | 0 |
| Clark | 2 | 0 | Montgomery | 1 | 0 |
| Clinton | 1 | 0 | Morgan | 1 | 0 |
| Delaware | 2 | 0 | Perry | 1 | 0 |
| Dubois | 1 | 0 | Randolph | 1 | 0 |
| Elkhart | 2 | 0 | St. Joseph | 2 | 1 |
| Greene | 1 | 0 | Sullivan | 2 | 0 |
| Howard | 1 | 0 | Tippecanoe | 1 | 0 |
| Jay | 1 | 0 | Tipton | 2 | 0 |
| Gibson | 1 | 1 | Vanderburgh | 4 | 0 |
| Knox | 5 | 0 | Vigo | 1 | 0 |
| Lake | 5 | 1 | Warrick | 1 | 0 |
| LaPorte | 1 | 0 | Wayne | 1 | 0 |
| Lawrence | 1 | 0 | White | 1 | 0 |
| Marion | 9 | 0 | | | |
| | | | Totals | 56 | 3 |

The second half of the year may be expected to show a slight increase over the first half, but even so it looks as if another new low record might be hung up for the state (158 deaths for

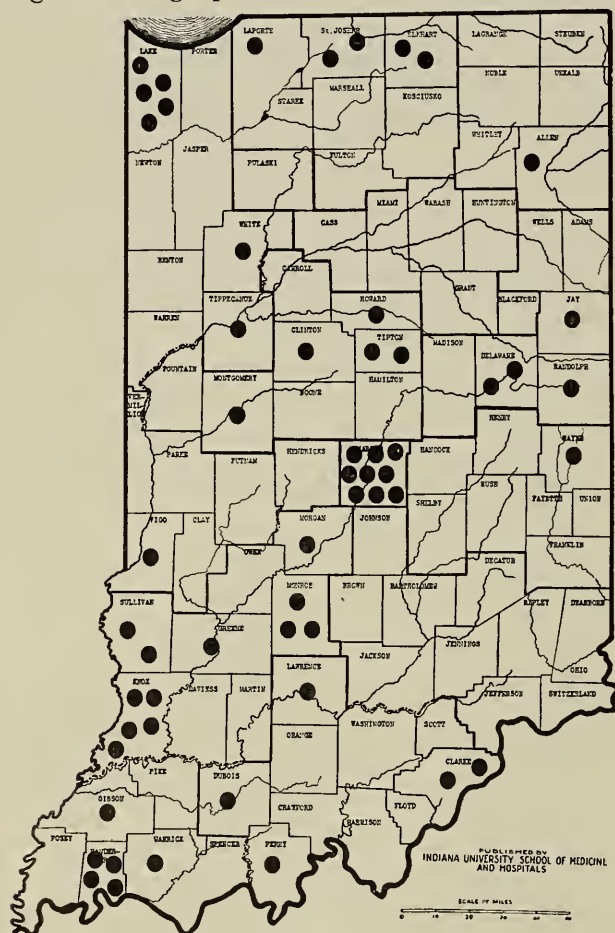
1929 was the lowest record up to that time). Particularly is this true since there is an unusually small amount of it during the present summer. A peculiarity of the present year is that certain counties have very high rates. Were it not for these few communities our present rate would be most gratifying.

The accompanying map will show the distribution of deaths for the half year just past. In the study of this map we must remember that certain counties with several deaths have large populations as compared with other counties. Three definite foci can be made out: (1) the "pocket" counties; (2) the counties of the northern tier; (3) the north central counties.

This favorable report should not be interpreted as a signal for relaxed effort. It merely proves that death from diphtheria is preventible, and that the fifty-six deaths already having occurred were likewise unnecessary.

T. B. R.

THE New York commissioner of health is doing a valuable work in his attempt to prevent the spread of quackery by means of the radio. He has made some headway by appealing to broadcasting stations, but perhaps his most effective work is in exposing, over the radio, quackery of every kind and description. The radio permits the agents of quackery to make a personal appeal to prospective customers, and, while most reputable newspapers of the country have eliminated largely quack advertising from their columns, the radio has not been so discriminating and now offers a fertile field for the spread of quackery and the victimizing of the gullible. Thus proprietary medicines, guaranteed to cure all the ills of humankind, the makers of health foods and faddists of every description, like Macfadden and his ilk, have been able to reach the public, and the preposterous claims put forth find ready acceptance among the credulous. A serious menace to public health are the quacks who claim to have sure or speedy cures for tuberculosis, cancer, venereal diseases and other incurable ailments. While it has been possible to curb their efforts through legal action, yet the fact that they have been "on the air" has been sufficient to give them prestige and business. The most serious blow to these fakers has been exposure on the air by the broadcasting of federal or state public health officials, and by such trustworthy organizations as the American Medical Association. The campaign must be continued, but, aside from the effect of the broadcasting, it is necessary to get the cooperation of the broadcasting associations, newspapers and the public. Every county medical society can wield a powerful influence in suppressing quackery, and that influence should be exerted to the fullest extent. When quackery is exposed openly to the public, the press not only will be ashamed to carry quack medical advertising, but will add its voice to the good work of suppressing fraudulent practices upon the sick.



Map of Indiana showing distribution of diphtheria deaths for the first half of 1930.

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AUGUST, 1930

EDITORIALS**PATHOGENESIS OF GALL-BLADDER DISEASE**

A good many years ago it was our privilege to be a member of a class in biology taught by a great scientist and a wise teacher. Discussing the danger to orthodox religious beliefs from the discoveries of science he said, "No one need be fearful that false scientific theories will undermine and destroy orthodox religious beliefs, for no sooner is a theory proposed than all the other scientists and brilliant minds of the time begin a rigid examination of the theory and if it be false they will soon discover its falsity." The same may be said of the many theories and hypotheses submitted by investigators and research workers to explain the bases of various natural laws underlying health and disease. Since the advent of the research laboratory many investigators are searching constantly for new facts and making rigid investigations of proposed theories to determine their truth or falsity. It appears to be impossible to propose a theory so well protected from attack that some scientific sharpshooter does not pierce the structure and lay it low. The path of medical progress is strewn with the wrecks of dead theories, and this is as it should be, for true science has but one goal and that is the truth. Dead theories testify to the honesty of scientific purpose as well as the diligence of investigators.

As an illustration of this sharpshooting of one research worker after another, we have the article of Koster, Goldzieker and Collins in the current issue of *Surgery, Gynecology and Obstetrics* in which exception is taken to Evarts Graham's theories on the pathogenesis of cholecystitis. Among the many excellent contributions which Graham has made to a better understanding of gall-bladder diseases, he has suggested the theory that cholecystic disease usually follows a primary hepatitis. His theory emphasizes the importance which a hepatitis has in the clinical picture of gall-bladder disease. He has shown conclusively that the two conditions, hepatitis and cholecystic disease, go together and believes that the former is the initial lesion. The above named authors, while agreeing with Graham that these two conditions usually occur together, disagree as to the sequence of pathologic events. They maintain

that infection first involves the gall-bladder and from this focus subsequently spreads to the liver, and they submit considerable evidence in support of their view.

At first thought it might be considered that this is a purely academic question, and that the afore-said sharpshooters might be allowed to enjoy their game without interruption from clinicians whose business it is to advise people how to regain their health or prevent them losing it. Unfortunately the question has important clinical significance, and we should like to see an agreement as to the actual facts if such an agreement is possible. It is perfectly obvious that the surgeon who looks upon the gall-bladder as the original focus of infection from which later the liver becomes infected is going to be a radical gall-bladder surgeon, attacking and removing all gall-bladders which can be shown to be infected. On the other hand those surgeons who assume that an infected gall-bladder is the second step in the sequence of liver, gall-bladder infection will lay less emphasis on the gall-bladder and more on the liver as the seat of the patient's complaints. Surgical opinion is divided along these lines so that today some surgeons are removing a very large percentage of non-calculous gall-bladders, approximately fifty percent, while others are much less radical, sixteen percent being non-calculous.

As a contribution to this discussion we invite the reader to study the follow-up records of the two groups of cases, the group containing the large percentage of non-calculous gall-bladders operated and the group containing a small percentage of non-calculous gall-bladders operated. He will find that a much larger percentage of ultimate cures occur in the latter group. Insofar as this fact has any bearing on the subject it favors Graham's contention that the liver is the first to become infected, for it is obvious that if the gall-bladder is first involved, that group having the largest number of early cases, such as the non-calculous group would show, ought to give the greatest number of cured cases. However, regardless of the facts involved in this discussion as to which organ is the first to become infected, it is to be hoped that the theory of gall-bladder priority in the pathogenesis of cholecystic disease will not be used as an argument for the removal of more gall-bladders. In the light of follow-up records, which is the court of last resort, the verdict is against radical removal of mildly infected non-calculous gall-bladders.

THE CURE OF CANCER

A recent bulletin of the American Society for the Control of Cancer, April, 1930, says, concerning the work on the cure of cancer, that radium treatment now is popular both in Europe and America, but in Regaud's clinic in Paris, where the results have been checked most carefully, this mode of treatment has been found useful only in cancer of epidermal origin and has a close com-

petitor in surgery. Treatment of cancer by intravenous injections of colloidal lead has been abandoned practically everywhere. The quest for a vital dye to serve as a chemotherapeutic agent is being pursued in many European laboratories, but no success has been reported. The attempt to immunize against cancer is being tried, but is in the experimental stage.

Concerning the cure of cancer, the *Bulletin* says that, "First, we want to face the facts and know for certain whether or not the patient actually has cancer. This implies biopsy. Secondly, we must be able to cure cases in all stages, even in the face of recurrences and generalized metastases. Thirdly, we want the cure to be permanent. These three criteria, histologic diagnosis, cure of metastatic cases, and permanent cures established by follow-up examinations, extending over five-year periods, should be applied to all alleged cancer cures. From this point of view immediate cures of local tumors in experimental animals, however intriguing, are false alarms. Serious and extensive clinical trial of any method by workers other than its advocate await, first, the submission of the sections to substantiate the diagnosis in all cured cases; second, proof that the disease had progressed to dissemination at the time of treatment, and, third, a five-year follow-up to show the permanence of the cure."

A HOOSIER CRUSADER

Tribute to the late Dr. Harvey W. Wiley is paid in the following bulletin issued by the Publicity Bureau of the Indiana State Medical Association:

"Pure food. Every American knows what that means. Few know what a fight it took to insure the American public that food purchased is pure, and few know anything about the man who made the fight. He was Dr. Harvey W. Wiley, Hoosier bred and born, who loved Indiana and loved to come back here. He died last week. A monument should be erected to him. Thus we pay tribute to our soldiers, our statesmen, why not to this man whose life story was as romantic as any pioneer, whose struggle for his ideals as keen as any patriot, whose devotion to his fellowman marked every step of his long life of eighty-six years.

"His death marks the passing of more than a man to the medical profession of Indiana. It marks the last of a great group of medical teachers in Indiana for Harvey Wiley was the last surviving member of the faculty who taught in the old Indiana Medical School among whom were such noted men as Drs. J. S. Bobbs, T. B. Harvey, R. N. Todd, John Chambers, J. A. Cominger, J. W. Marsee, L. D. Waterman, C. E. Wright, T. M. Stevens, W. B. Fletcher, Dougan Clark, and G. W. Mears.

"Doctor Wiley was graduated from Hanover College in 1867 at the age of twenty-two; had taken his A. M. degree in 1870; his M. D. at

Indiana Medical College in 1871; his B. S. at Harvard in 1873; meantime teaching Latin, Greek, and chemistry in several colleges. In 1874, when Purdue University was founded, Doctor Wiley was appointed its first chemist, and later was made state chemist of Indiana. In 1883 he was appointed chief chemist of the Department of Agriculture at Washington. There he remained until 1912, a period of twenty-nine years, at once the major portion of his mature life, and the whole period of the fight for pure food in the United States.

"Mark Sullivan, in his history of twentieth century America, 'Our Times,' devotes eight interesting pages to the battle that Wiley put up against the entrenched interests and a powerful lobby in Washington in getting through the pure food act.

"One of the earliest of the state chemists, one of the first men to take an interest in food sanitation, and easily the outstanding figure in the crusade for pure food, was Dr. Harvey Washington Wiley, a very mountain among men, a lion among fighters,' writes Sullivan. 'Wiley brought to his task of popular education an unusual array of talents. He could write and speak interestingly and authoritatively. He was convincing and persuasive. He, better than anyone else, knew the intimate details of the partnership that had come into being between the preserved food manufacturer and the commercial chemist, and the harmful effects it was having on the digestive organs of the American people. In 1903 he caught and held the attention of the entire country through the so-called "poison-squad" experiments, in which he fed volunteers, from the employees of his bureau, foods containing preservatives, with the object of determining whether or not they were injurious to health—an episode which caused Doctor Wiley to be called, jeeringly or affectionately, according to the point of view, "Old Borax." The *New York Sun* bestowed on him the title, "chief janitor and policeman of the people's insides."

"The work which Doctor Wiley started does not cease with his death. Indeed, impetus is added to the various movements which have been direct outgrowth of his battle for pure foods. With such organizations as the Council on Pharmacy and Chemistry, Committee on Foods, and the Bureau of Investigation of the American Medical Association, active groups constantly are battling in the interest of science and the public along the lines laid down by Doctor Wiley.

"Shortly before his death Doctor Wiley published his autobiography, which is an all-absorbing story of this crusader who fought a fight for the health of every American and won against the entrenched power of trusts."

COLLECTION SERVICE AND INSURANCE

Within the last month we have received three complaints concerning alleged swindling operations of collection agencies that have secured con-

finding Indiana physicians as patrons. THE JOURNAL has discussed the collection agency proposition so many times, and been so emphatic in placing the stamp of disapproval upon practically all collection agencies that it really would seem that readers of THE JOURNAL should give some serious consideration to the matter before considering favorably any proposition from any collection agency. We really have reached the point where we feel that we have little sympathy for the physician who bites at the bait thrown out by the ordinary collection agency. If you are going to patronize collection agencies then patronize an agency in your own town or near enough to you so that you can make a full investigation as to trustworthiness and manner of operation. Don't pay anything down; don't permit the agency to use methods that will injure seriously your reputation with the client; and, above everything else, don't sign any contract without reading and analyzing the contract at your leisure, and don't believe all of the glib stories told by the salesman or solicitor. To our notion the most satisfactory scheme of collecting bills for professional services rendered is through a credit-rating bureau established by the physicians themselves.

What we have had to say concerning collection agencies applies with equal force to the many small insurance companies offering medical defense, health, accident or automobile insurance. There are countless numbers of insurance companies that follow practices that are of a swindling or near-swindling nature. Most of them throw out the bait that they offer something that is cheap, but the policyholders usually discover, later on, that the so-called protection is expensive and oftentimes is no protection at all. In the matter of insurance, of whatever kind, the physician who is wise will buy his policies of only those companies that are well established and that have built up and maintained a reputation for fair dealing. The policy probably will cost more than policies in some of the little fly-by-night companies, but in the end it will be far more satisfactory and profitable. Physicians are rated as suckers. Why not change that rating?

FEES OF PHYSICIANS VS. LAWYERS

A good deal is being said in the lay press now concerning the high cost of illness, and it seems that many of the writers have the mistaken notion that the blame should be placed upon the medical profession. Not a few writers talk about the big fees and the large incomes enjoyed by physicians, when as a matter of fact physicians on the whole are paid far less for skilled services and receive less as a direct return upon investment than those who follow any other skilled vocation.

It makes us smile to note how some writers value medical and surgical services, and we desire to remind them that from actual experience we know that when we call upon a lawyer for an opinion

concerning the validity of a deed to property involving not to exceed five thousand dollars the lawyer will give his opinion inside of fifteen minutes and said opinion will cost not less than twenty-five dollars and probably anywhere from fifty to two hundred dollars depending upon the reputation and experience of the lawyer. We are sued for damages amounting to twenty-five thousand dollars, which suit is a plain "hold-up game," the defense of which requires no particular preparation, the suit lasting but three days and resulting in a favorable judgment, but nevertheless we are "stung" to the tune of \$2,500 by an attorney who charges ten percent of the amount alleged to be at stake. Admitting that the lawyer had spent a few hours preparing his brief, and parts of three days in the trial, we submit that a fee of \$2,500 is so greatly out of proportion to the fees charged by physicians and surgeons as to be positively ridiculous. The lawyer's preparation for his life work, and his expenditure of time, effort and money ordinarily does not cost one-fourth what it costs the physician to prepare for his work. The physician is lucky if he gets ten dollars for a consultation which may be the means of prolonging life, and he may get from \$150 down to nothing for an operation or for weeks of skilled attention which saves a life. The "poor down-trodden and much abused lawyer" would consider himself insulted if offered compensation comparable to that paid to the well-trained and competent physician and surgeon.

Even the veterinarian is paid more for attending the sick hogs of a farmer than the physician is paid for attending the children of that same farmer. Can it be that hogs are worth more than children?

There is room for some change of opinion concerning the value of professional services.

THE PHYSICIAN'S RECREATION

We pity the physician who early in life has not learned to play, and who does not continue to play occasionally throughout his career. We believe that hard work and plenty of it, coupled with the consistent practice of rendering the best service possible, and at all times aiming to keep abreast of the times through reading and postgraduate work, should be the aim of every physician. However, the old adage, "All work and no play makes Jack a dull boy," applies to physicians, and altogether too often the physician, whether he has a large practice or not, keeps his nose to the grindstone to the detriment of himself, his family and his patrons. Two or three short vacations within each year will give him renewed interest in his work and better fit him for his arduous duties. The vacations must be real vacations, when medical practice is forgotten entirely. The vacation may be with rod, gun, golf club, or spent in traveling, depending upon the taste of the physician, but it should be

planned to divert him from his regular vocation and give him a change of scene and surroundings. The editor's pet vacation hobby is a visit to the wilds of Canada, miles away from human habitation, even away from mail, telephone or telegraph. There on lakes and streams, with fishing equipment, and accompanied by the good wife, who also loves such an outing, two weeks of the finest sport in the world is enjoyed at least once a year. A couple of experienced guides do the heavy work of paddling the canoes, carrying luggage over the portages, and the work of the camp. Thus the entire time is devoted to rest and recreation, with the inevitable result of furnishing new activity and interest in professional work upon return to civilization. Some physicians may say that they cannot stand the expense, but we do not believe any yarns like that, for a real vacation or outing can be made very inexpensive, and, if need be, it can be near home, though we really feel that an entire change of surroundings is better. That such a vacation pays in dollars and cents as well as in improved health and spirits has been proved over and over again by the experience of those who, early in life, have seen the beneficial effects of such vacations. Work while you work and play while you play, but don't spend your whole time at either.

DRUGLESS HEALERS PRESCRIBE DRUGS

In Indiana we do not hear so much about drugless healers as we did a few years ago, and yet every populous community has one or more drugless healer of one kind or another preying upon the public. However, it is worthy of note that a good many chiropractors, formerly barbers, section hands, elevator men, or followers of other occupations, have not been able to make a living at chiropractic and have returned to their former occupations. They don't seem to have had the nerve or intelligence to undertake drug healing, which has been adopted by many of the chiropractors, so they fall by the wayside. In this connection it is interesting to note the character of legislation passed by some states to cover the drugless healer situation. Some of the legislation is not only inconsistent but positively idiotic in its provisions. For instance, Rhode Island has enacted a law which provides that licensed chiropractic physicians shall be entitled to the same services of the pathological and chemical laboratories of the State Board of Health as are available to other physicians. In a former number of *THE JOURNAL* we commented on the fact that some of the drugless healers have obtained narcotic permits, and, of course, that means that they are prescribing narcotics without giving attention to legal provisions governing such practice. In reality those same chiropractors also are administering drugs other than narcotics, and, of course, without possessing the slightest knowledge of materia medica and therapeutics. What a travesty!

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital. We invite and urge you to use this Service.

It is absolutely free to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in *THE JOURNAL*, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask *THE JOURNAL* about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want *THE JOURNAL* to serve you.

If the average physician were as slow in coming to an emergency call as the ordinary person is in paying his doctor bill what a howl would go up.

Any medical society is fortunate if it can have its headquarters office in charge of a competent attendant, where telephone service and a collection service for members of the society can be operated.

The dues of the San Francisco County Medical Society are fifty dollars per year. How an Indiana physician would pour forth fire and brimstone if he were asked to pay fifty-dollar medical society dues!

We howl a good deal about the advertising quack and try to find means to punish him but we seldom criticize or punish the newspaper or magazine publisher who makes it possible for the medical fakers to thrive.

The total registration at the Detroit session of the A. M. A. was 5,104. The six states showing the largest attendance were as follows: Michigan, 1,627; Ohio, 579; Illinois, 429; New York, 351; Pennsylvania, 292; Indiana, 208.

The president of the California State Medical Association made an excellent point when he said, "If Society permits the poor man to exist, then Society should share equally with the physician the burden of the poor man's sickness."

FIGURATIVELY speaking, there was weeping, wailing and gnashing of teeth on the part of some of the members of the Women's Auxiliary during the Detroit session of the A. M. A., but aside from that the women had some real nice parties.

THE American Medical Association is to have a bureau of medical economics. That means that the A. M. A. at last is going to take some interest in the purely business problems that confront the practitioner of medicine. Good! Bring on the music!

REMEMBER that the annual session of the Indiana State Medical Association will be held in

Fort Wayne, Wednesday, Thursday and Friday, September 23, 24 and 25. Come early. The program starts at 7:30 a. m. on Wednesday with a golf tournament at the Fort Wayne Country Club.

If you want to know a little of what is going on in Indiana that savors of progress for state medicine, just secure some of the bulletins sent out by the field workers for the Riley Hospital, and listen to some of the lectures by University nurses who are working Indiana with a fine-tooth comb to secure patients for the Riley Hospital.

THE pure food and drugs law prohibits, with severe penalties, the sale of adulterated or misbranded foods and chemicals, and yet the government turns around and sells adulterated alcohol and reserves the right to refuse to tell how badly the alcohol is adulterated so that it loses its standing as alcohol. A fine piece of consistency!

WHEN the Federal Government gives all medical and surgical care to veterans suffering from injury or disease that is not connected with service, it is a step in the direction of socialized medicine. The Veterans of the World War deserve generous consideration, but not to the extent provided in the Veterans' Bill that President Hoover very justly vetoed.

It may be true that we should sell scientific medicine to the public, but too often when we attempt to do that some publicity seeking physician succeeds in getting his name before the public. Medical advertising never will succeed or be indorsed by reputable medical men in general until such advertising is in the name of the profession and not an individual.

DR. FRANK BILLINGS, for many years professor of medicine and dean of the faculty of the Rush Medical College, has given \$100,000 to establish four fellowships at Rush Medical College. With characteristic modesty Doctor Billings takes scant credit for the donation, but insists that the fellowships be named in honor of some of his confreres. Not many medical men are so modest.

WE are very much pleased to know that the A. M. A., through a resolution passed at the Detroit session, will begin a much more active campaign in the interest of hospital inspection and standardization. There is no reason why this work should be done by an independent organization representing only a limited number of the reputable medical men of the country.

THE A. M. A., at the session held in Detroit early in June, took a more forceful attitude concerning the standardization of hospitals and classifying them under an approved rating. This is a step in the right direction, for the A. M. A.

should be the body that places the seal of approval upon high-grade hospitals, and not a self-constituted body that has made more or less of a mess of it.

MEDICAL bills, most of which propose vicious experiments of one kind and another, continue to be introduced into Congress. This means that the medical profession, through its established officers and employers must be ever alert in efforts to prevent the passing of legislation that is injurious to public and medical profession alike. We should maintain a bureau in Washington for the sole purpose of fighting these vicious medical bills.

WE are told that Doctor Cabot, former dean of the medical department of the University of Michigan, has accepted a position as consulting dean of surgery at the Mayo Clinic. We wonder if he is going to try to turn the Mayo Clinic into an institution that is a part and parcel of socialized medicine. It is reported that he was asked to resign as dean of the medical department of the University of Michigan because of his state medicine beliefs.

WE get very tired of hearing some laymen publicly extoll a particular operation or method of treatment and give credit to some individual physician when perhaps that physician is entitled to no credit whatsoever and the operative method or treatment is relatively old and employed rather generally by well-trained physicians. Likewise, we have nothing but censure for the physician who inspires such cheap advertising, and usually it is a physician whose name is mentioned prominently who is guilty of inciting the write-up, and for the one purpose of self-exploitation.

WE have little sympathy for the hospital in Chicago that is in trouble as a result of the mixup of newborn infants and the doubt existing in the minds of parents as to whether they really have received their own babies when leaving the hospital. On the face of it the evidence looks extremely bad for the hospital. However, as we have had occasion to say before, there is no excuse for making such mistakes, and, while we admit that it is possible to err, we still believe that a hospital that adopts the right kind of precautionary measures will never be found guilty of mixing up babies in the maternity ward.

WELL, one of the Mayos called on Will Rogers, and, as might be expected, Mr. Rogers mentioned the fact in one of his published weekly letters, and with it a nice little compliment and boost for the Mayo Clinic. It really is funny how some medical men get free advertising and apparently without any effort on their part. You can't stop that sort of thing, for we know that many medical men receive favorable publicity which is unsought

and probably very distasteful to them. The Mayos have let others toot horns for them, but there are altogether too many medical men who toot horns for themselves, and that at least we ought to be able to suppress.

THE lay press, under date of July 20th, announces that malaria has appeared in the Calumet district in and around Hammond, Indiana, and that it is supposed that the malaria germs have been brought into the district by persons from the south known as carriers, "inasmuch as the anopheles mosquito as the main carrier does not inhabit regions this far north." Presumably this information came through health officers, but we fail to understand why they should give out such erroneous information when entomologists know that the anopheles mosquito is found all over the country, though more prevalent in some districts than in others in consequence of stagnant pools or poor drainage.

LOOK out for the sleek-looking and glib-talking man representing himself as a physician who calls upon you saying that he is driving through your town and has had the misfortune to have his car laid up for repairs and is anxious to secure a temporary loan to tide him over until he can get home. In the first place there is no excuse for any physician being caught without funds and finding it necessary to beg from strangers. He certainly could telegraph to his bank or to relatives or friends and secure help in an emergency. In the second place, no one is justified in loaning money to an absolute stranger, but if tempted, then look up the reputed physician's record in the A. M. A. directory.

THE golf tournament in connection with the Fort Wayne session of the Indiana State Medical Association is to be held at the Fort Wayne Country Club, Wednesday forenoon, September 24th. The first players will start at 7:30 a. m. sharp, and be succeeded by other players as rapidly as possible. All matches must be concluded so that luncheon can be served at twelve o'clock sharp, thus enabling the players to get back to the city in time for the opening scientific meeting at two p. m. Prizes for the winners in the tournament will be awarded at a time and place designated in the official program. Those desiring to enter the golf tournament should send their names and club handicap to Dr. B. W. Rhamy, Wayne Pharmacal Building, Fort Wayne, Indiana.

WE thought it was bad enough when a few thousand physicians exhibited such a lack of common sense and good judgment as to attach their signatures to an indorsement of Lucky Strike cigarettes, but now a more nauseating dose comes through an indorsement of a facial soap by "William Allen Pusey, ex-president of the A. M. A.

and for ten years editor of the *Journal of American Dermatology*." The advertisement appears in the *New York Times* for July 20th. Knowing that theatrical and moving picture stars as well as professional golfers and on down to pugilists are paid for their indorsement of everything from corn salve to hair tonic, whether the indorsers ever use the articles or not, we cannot help wondering if Doctor Pusey is paid in the usual way.

THEY say that peanuts are good for brain workers. That being the case, the editor of THE JOURNAL ought to accomplish a good deal more than he does, for he has been eating peanuts almost every night for many years. However, like a small boy, he has been eating peanuts because he likes them and not because he had the faintest idea that they were good for brain workers. In fact, he is of the opinion that they slow up rather than speed up brain activity. We are just wondering if the Peanut Growers' Association of the South, a rather powerful organization, is not responsible for this propaganda concerning the value of peanuts, and if a little later will not announce, perhaps, that eating peanuts will grow hair on a bald head, or remove corns and bunions.

ROBEY and FINLAND in the May number of the *Archives of Internal Medicine* claim that tonsillectomy may be performed during the active stage of acute rheumatic fever without harm to the patient from the operation, as the operation offers no more danger than when performed under what appear to be the most favorable conditions. The authors' evidence is based upon a series of 165 cases, and the only complication of delayed operation was an accompanying bronchitis or bronchial pneumonia. Cardiac conditions practically never contraindicate operation except in extreme cases. In the series of cases considered, the decision to operate was made by internists and not by rhinologists. In several cases in which symptoms repeatedly occurred the results of operation were brilliant.

OH, boy! What a thrill we have received from making use of a new five-ounce fly rod, perfectly balanced and of exquisite workmanship. To play a five-pound bass with such a rod gives a thrill that makes one wonder why we practice medicine—or, better still, why do not vacations come oftener? The physician who does not enjoy fishing or hunting misses a lot in this world, and to every young physician we offer the advice, "Interest yourself in some recreation that will get you next to nature." A wise man has said, "Ride a hobby, but don't let the hobby ride you." For many years with us it has been fish when the fish are biting best, but work like h—— the rest of the year, and we are sure that the recreation has prepared us each year to do more and better work.

WHAT skillful advertising will do is shown in the enormous sales of worthless paste and powders used for caring for the teeth. The American public spends annually over sixty million dollars for dentifrices. The public has been led to believe, mistakenly of course, that an acid mouth is abnormal and unhealthy, that pyorrhea can be treated or cured by some form of tooth paste, powder or wash, and that anyone may have pearly white teeth if a certain dentifrice is used. Some of the popular dentifrices are positively harmful, and from a statement recently issued by the American Dental Association it would seem not many of them are any better than warm salt water and powdered chalk. However, the American public continues to be victimized by specious advertising concerning cigarettes, tooth paste, patent medicine, and many things of questionable or no merit of any kind whatsoever.

RECENTLY a patient has handed us a reprint, presumably mailed to her by the author, extolling the virtues and success of an operation which the author claims to have originated and which was recommended by him to the patient in question. The reprint covered an article reputed to have been read before his county medical society, but no quack ever got out a more specious piece of advertising and self-exploitation. No doubt the members of the county medical society before which the paper was read already know about the undignified and unprofessional conduct of the member who is making such an open plea to the laity for business, and will act speedily and effectually in expelling the guilty member from membership in the county medical society. Why procrastinate in bringing such a fellow to justice, and, in fact, why do our county medical societies ignore the newspaper self-exploitation of some of their members when suspension or expulsion is in order?

WELL, well! Doctors Coffey and Humber, of San Francisco, who stirred up such a lot of newspaper publicity concerning their alleged cure for cancer, have appeared before a Congressional Committee in Washington which is considering a proposal to authorize an appropriation of federal funds for research applied to malignant diseases. It is reported that Doctor Coffey testified concerning his cure that after the first injection the patient usually gained relief from suffering. After the second and third injections, pain disappeared. As a result of the injection of the extract the malignant tissue begins to break up and disappear from the center. As a mere sidelight, it may be stated that though it is reported that 1,300 persons subjected to this treatment have shown a breakdown of cancerous tissue, yet no known cure has been proved. Somehow or other we are losing faith in the alleged modesty of these two San Francisco physicians who have been exploited by

the lay press from one end of the world to the other.

THE Guild of Prescription Opticians of America is calling attention to the vicious advertising of some optometrists in which the use of "drops" in the eyes for the determination of errors of refraction in the adjustment of glasses is condemned, and the guild is attempting to counteract this by advertising direct to the public with the recommendation that the safe way is to consult a *physician* for any symptoms referable to the eyes. It would not be amiss to point out that many optometrists admit their inability to determine and correct accurately some of the complicated errors of refraction until after the use of "drops" which are applied conveniently by some dupe of a physician who has a legal right to prescribe medicine. Many a patient can testify that his or her glasses were not satisfactory until the static refraction was determined by suspending the accommodation and afterwards securing an appropriate correction of the error. Physicians in general should acquaint their patients with these facts.

THE dangers accompanying the indiscriminate use of physical therapy apparatus is very well illustrated in a case reported to us from southern Indiana in which a man was given some sort of mechanical massage of the abdomen by a chiropractor and a few hours later was in the hands of a surgeon for relief of a ruptured appendiceal abscess. The patient had been having pain and tenderness in the abdomen which to any intelligent physician would have appeared suspicious and led to an examination that undoubtedly would have pointed to appendicitis as the cause of the trouble. The chiropractor promised prompt relief, and temporarily the promise held true, for with rupture of the abscess the patient was comfortable for a very short time, then developed the symptoms that required the services of a skilled surgeon. The point to be emphasized is that mechanotherapy cannot be employed by anyone indiscriminately and without intelligent knowledge of the complaint for which the treatment is being prescribed.

Nor infrequently a little investigation as to the reputation and standing of a speaker who seeks permission to address an organization will save embarrassment in case the speaker, as so often happens, is using a privilege for personal aggrandizement, the spreading of vicious propaganda, or to promote some commercial enterprise. Recently a man calling himself "Dr. Frank W. Osgood, well-known physician and surgeon, from California," made a talk before one of the luncheon clubs in Lake county. A request of the American Medical Association for information concerning such a man brought the following letter: "Dr. Frank W. Osgood, well-known physician

and surgeon from California,' is neither well known nor a physician. We have absolutely no record of him, not even in our quack files." Several of the county medical societies in Indiana have been imposed upon by men representing themselves as having some scientific or commercial message, and in each instance no particular effort was made to find out something about the speaker in advance of his appearance before the society. If a man can be vouched for by trustworthy persons, then and then only should the request for appearance before any society be considered.

FRANCE has adopted sick benefit insurance which will require an expenditure of from 350 to 400 million dollars and perhaps more. In carrying out the provisions of the bill it will be necessary to employ certain practitioners as exclusive panel physicians, though the bill permits the insured to choose freely his own physician. That trouble is ahead for the physicians of France is certain, and they probably have the sympathy of the panel physicians in England where a similar system has worked disastrously. If a panel physician is honest and attempts to stop malingering and unnecessary demands upon the public purse, he stirs up the displeasure and even opposition of his patrons and they apply for and receive or are assigned to a different panel physician. Thus it would seem that a premium is placed upon dishonesty and incompetency, with the whole system working to the disadvantage of everyone concerned. God help us if we get such a system or anything like it in the United States, and there is no telling what will happen in the near future with so many foreign countries experimenting with these dangerous forms of socialized medicine.

A SPECIAL delivery letter, properly addressed to a firm in Indianapolis, was mailed in Fort Wayne at exactly six p. m. and delivered to the firm addressed at four o'clock on the afternoon of the following day, as evidenced by a long distance telephone call for the purpose of learning something about the cause of delay in giving the special delivery letter appropriate attention. It is 116 miles by road from Fort Wayne to Indianapolis, and there are trains and several through interurban cars that make the distance in less than four hours, and yet it takes nearly twenty-four hours for a special delivery letter to be delivered to the one addressed. Not infrequently letters mailed in Chicago before six p. m. are not delivered in Fort Wayne until the next afternoon. To our notion there is a screw loose in the postal service when such things happen. What occurs in connection with mail also occurs with express, but delays in receiving express can be accounted for on the ground that a lack of competition makes the express companies arrogant and slack in service. We hear a lot about this being the "age of service," but a sample of service

such as we frequently encounter is disappointing to say the least.

DR. THURMAN B. RICE, that pungent writer for the Indiana State Board of Health, has an interesting article in the Board's monthly bulletin for March, in which he points out that the youth of today are not going to hell as rapidly as some would have us believe, and he entertainingly shows that history proves that from Adam and Mother Eve down to the present time, youth has had its fling, and that those who are so pessimistic about the future of the youth of today are some of those who also sowed their wild oats when younger and now seem to be "crabbing" because they are too old to get back in the game any more. He winds up as follows: "By no means all, and by no means a large percentage, of our young folks are going to the bad. To those who are not flappers, shieks, jazz hounds, cake eaters, lounge lizzards, and drugstore cowboys; to those who are getting an education working themselves through school, working and saving their money and preparing themselves for parenthood and citizenship, and further are engaged in wholesome fun and athletics and having a good time while they are making men and women of themselves, to these we look for the future, and in them the future is secure. The human race did not shoot its last wad when it produced the present generation of self-styled super men."

TALK about biting the hand that feeds you! We read in the *New York Times* for July 20th of an interview in Havana, given by Prof. Victor Fruhwald, of Vienna, who recently toured the United States giving lectures before medical societies and talking about his specialty, in which interview he is reported to have said that "America inspires a lack of confidence, for the visitor soon begins to feel that a dollar will arrange anything. The medical fraternity seems to be without much conscience, and its members all seem to be thinking about how much money they can get out of a patient rather than how much good they can do a patient. They operate upon all occasions. Their first thought seems to be to perform an operation, for that brings in more money than conservative medical treatment does."

No matter what Professor Fruhwald may have thought, it certainly was a gratuitous insult to flay publicly the American medical profession, if he was its guest as he says, and to indict each and every member of the profession on charges that we know are not true as regards all the profession. We admit that we have crooks and incompetents in the medical profession, but so are there crooks and incompetents in the clergy and legal profession, but it does arouse our ire when one of these foreigners brands each and every one of us as scalawags, and particularly after we have shown such foreigner courtesies and hospitality.

BETTER business bureaus are beginning to train their guns on the collection agency evil, and in a warning to business and professional men one bureau in a quarter-page advertisement in the daily press makes the following deductions: 1. High-pressure collection agencies are more interested in securing the payment of an advance fee than they are in making collections. 2. A large percentage of these collection agencies do not make returns to their clients. 3. That many of the contracts involved are so worded that it is next to impossible to hold the agency legally responsible. 4. That the methods of many of the high-pressure collection agencies are unjust and that the debtor is subjected to treatment which absolutely destroys any semblance of good will which he may have held for the creditor. 5. That a large percentage of the high-pressure collection agencies flourish for a few months and then disappear.

There are a few reputable collection agencies, but some effort should be put forth to distinguish the good from the bad. All contracts with collection agencies should be read very carefully to make sure that they contain no tricky or obscure clauses which are not understood by the signer. Often the representatives make verbal misrepresentations, and some physicians even go so far as to pay solicitors in advance for collection schemes that are impractical and unsound.

RULINGS have been issued by the Commissioner of Internal Revenue to the effect that the taxpayer has the right to consider the entire amount received as professional fees as earned income if the taxpayer is engaged in a professional occupation such as medicine or law, even though the taxpayer employs assistants who perform part or all of the services, provided the client or patient is that of the taxpayer and looks to the taxpayer as the responsible person in connection with the services performed. This ruling also will apply to income received as professional fees from a professional partnership, even though the partnership employs assistants who work on a salary basis, provided the clients or patients consult some active member of the partnership, and look to some active member of the partnership as responsible for the services performed. These rulings of the commissioner of internal revenue were made as the result of an appeal made by Doctors Arnett and Crockett of Lafayette, Indiana, with whose counsel the American Medical Association cooperated with counsel employed by the Association. Hurrah! And THE JOURNAL first suggested to Doctors Arnett and Crockett that they ought to fight the matter out for their own benefit as well as the benefit of the medical profession at large, and urged the A. M. A. to join in the matter. The decision is a just one, and favorably affects a large number of prominent men in the medical profession.

AN editorial on "Criminal Incompetence," in the June issue of the *Medical Sentinel*, after calling attention to a needless death from bungling surgery by an incompetent, says that the medical profession condones too much. Good intentions in surgery are not enough. A man who is equipped poorly to practice surgery has no business to practice surgery, and the fact that his intentions are good absolves him from no blame in such an incident as the one mentioned. The editorial concludes by saying that hospitals are to blame for much of the poor surgery, for if a good hospital wishes to continue to be considered a good hospital it must protect itself as well as the patient by requiring consultation with a member of the attending staff by all outsiders who wish to undertake major surgical procedures within the hospital. Good surgeons will welcome such counsel. We might go a step further by saying that not infrequently certain members of any hospital staff might with propriety seek counsel and advice from other members of the staff before attempting to do surgical work for which they have had little training or experience, for, as the editorial writer quoted says, "The objective results of ignorance are not improved by saintly intentions on the part of the blunderer. A patient lost by stupidity cannot be brought to life by fears of contrition. The surgeon whose judgment is flawless does not exist. To meet crises we must have the courage that comes only from the knowledge that we have done our utmost to prepare ourselves, to sharpen our judgment for emergencies."

MASSACHUSETTS has been threatened with state medicine through a proposal filed with the legislative clerk of the Massachusetts House of Representatives, early this year, in a measure that would create a new state department to furnish free and complete medical service to the people, patterned after the Bureau of Medicine and Surgery of the United States Navy. The proposal provides for the abolition of the department of health and the department of mental diseases, these departments to be replaced by a new department which also would assume certain activities in the medical line of the department of public welfare. The new department would be in charge of a committee to be known as medical administrator of Massachusetts, whose salary would be ten thousand dollars, and allowances and provisions for himself and five assistants at eight thousand dollars each. It is proposed that the new department will provide and maintain hospitals and furnish necessary drugs and mechanical appliances for the patients. An initial appropriation of one million dollars for organizing the department is provided for in the bill. As yet Massachusetts has not gone over to state medicine, but who knows what will happen in the near future, and who knows how soon similar bills will be introduced into legislatures in

various states of the Union. However, some continue to say that state medicine never will be a reality. It is time to do a little thinking, as also time to do a little acting, and as soon as the medical profession as a whole realizes this situation the better it will be for all concerned.

A MEMBER of the Indiana State Medical Association writes us that after he had taken care of various members of a family for over a year he rendered a bill. Having some hesitancy about pressing collection he said nothing further about the account, but six months later learned that the family had been patronizing another physician in the community and paying cash for the services. He says that now he is a firm believer in monthly statements and endeavors to collect promptly from those who can pay. He thinks that if patrons are going to overlook the payment of a bill for professional services rendered it is a good plan to get the bills in early so that if the patron concludes to change doctors because he receives a bill said patron should be given a chance to make the change before a lot of time, energy and skill is donated to him. He also has come to the conclusion that his best friends are the ones who pay promptly, either with or without receiving a statement immediately following the rendering of the services. To all of which we submit that the time has arrived when physicians should use business methods in professional work, and that doesn't mean being so hard-boiled that leniency or charity cannot be granted where due. The trouble of it is the average physician is too charitable and too lenient to those who can but do not pay, or if they do pay it is after everyone else has been paid. It is getting harder and harder for the average physician to make a living at the present time, with the cost of living higher than ever before, and professional fees approximately the same as they were twenty-five years ago, and it is time that members of the medical profession awake to the fact that commonsense business methods are just as necessary in the practice of medicine as in running a dry goods store.

IN the Correspondence Department of this number of *THE JOURNAL* we publish a letter from one of our medical friends in the southern part of the state who offers a vigorous complaint concerning the inexcusable practice of certain city specialists who give a comprehensive and detailed report to the patient concerning diagnosis and treatment rather than send such report to the family physician. We have seen a sixty-page, typewritten report of an examination and opinion by a Chicago internist, sent direct to the patient who went independently to the internist. The report was even more comprehensive than necessary had it been sent to a physician, and in some respects it bore the earmarks of being "apple sauce" because the well-known internist presumed to pass an opinion concerning features of the case

about which he knew absolutely nothing and about which he was not supposed to know anything. He probably thought that his voluminous report would make a great hit with the patient and justify the very large consultation fee which he received. To use a slang phrase he was "playing to the galleries," and if he doesn't know it already he should know that the medical profession as a whole dislikes that sort of "grand-standing." Furthermore, he as well as all other specialists who send the patient a detailed report concerning medical treatment, which report should go to the family physician or some physician who can carry out the treatment, deserves severe condemnation. The old saying, "A little knowledge is a dangerous thing," holds true when it comes to teaching self-prescribing to patients. More harm than good has come from the practice of some physicians in telling their patients to take quinine, aspirin, thyroid extract, insulin and dozens of other preparations the sale of which direct to the public has been an encouragement to self-prescribing. The practice has been brought about through a mistaken notion on the part of physicians concerning real service to their patients.

A YOUNG girl of twenty-two or twenty-three, stenographer by occupation, with no other means of support, had very bad hemorrhoids. An operation was indicated without question. She insisted upon having a private room and paying her doctor rather than to go to the wards to which she was really entitled by courtesy.

She requested that expenses be cut down close as possible. A private room was arranged for at \$4.00 per day. The surgeon very generously said, "Fifty dollars will be enough for me from that poor girl and I will pay the anesthetist."

When she arrived at the hospital her friends insisted upon a room de luxe at eight dollars per day and a day and night nurse. She was kept there three weeks when ten days would have been sufficient. Didn't that jar the surgeon?

A microcephalic idiot infant was brought to me for an opinion—the advice was given flatly and in a straightforward style. The father made probably \$2,500 a year. Later the child was taken with recurrent convulsions, twenty to thirty occurring in the twenty-four hours.

I arranged to place that child in the Children's Hospital at a price within the father's capacity to pay, and promised to look after the infant without charge.

Then what happened? The mother insisted upon a private room, a day and night nurse, with a total expense of twenty dollars a day. This was kept up, not only until the father's savings were exhausted, but until he had been obliged to borrow money to keep it up until I insisted this sort of tragedy must cease and the child, in justice to all, should have systematic institutional care.

And yet some people inveigh against the high cost of sickness and the great American public

continues to pay ninety millions of dollars a year for chewing gum. This is a circumstantial proof that some people work too much with their jaws.

Five millions of dollars are spent daily in the United States for cosmetics, perfumes and various other toilet preparations. Ye gods! In other words, the weapons in the warfare of the feminine sex against their masculine prey bids fair to be only less expensive than a World War.—*The Hahnemannian Monthly*, March, 1930.

THERE isn't a month of the year that we do not hear from some Indiana physician concerning a swindling game played upon him by some collection agency. Right now representatives of an eastern collection agency are canvassing Indiana and trying to show how trustworthy they are by producing a beautifully engraved bond from a reputable financial institution in the east guaranteeing patrons against loss. If the prospective patron will read very carefully all of the provisions of the contract offered to him he will discover that the bond isn't worth a tinker's dam, and that in the final analysis he will be the one to suffer greatest loss. A correspondent writes us, "You have condemned collection agencies so generally that one wonders if you know of any collection agency that you think is thoroughly trustworthy." To this we answer that we are not prepared to recommend any collection agency, for we really believe that there isn't one agency out of a hundred that can be considered trustworthy in the sense that the physician will not get the worst of the bargain. We are more inclined to patronize local agents or bureaus, the credit and standing of which are known to us. Such agencies will not pin the patron down to a contract which perhaps is drawn trickily. The personal equation always must be considered, and out-of-town and out-of-state collection agencies may or may not be operated by men of integrity. Most of the collection agency contracts that we have seen have a "string tied to them," and show very patently that they are founded on two premises: first, that the collection agency must in some way be guaranteed the lion's share of the collections, and, second, that all physicians are dishonest or untrustworthy and in consequence they must be bound down by an iron-clad contract which does not permit them to escape punishment by the agency. Our advice is to sign no contract, and we might offer the further observation that any physician can collect more than ninety percent of his accounts *that can be collected* if he will put forth a little effort in his own behalf. If he needs assistance then he ought to call in local assistance, and such assistance as can be depended upon to secure results, if obtainable at all, and without undue trouble.

THE secretary of the Indiana State Board of Health says that the most important matter to be considered by the medical profession of Indi-

ana at this particular time is that of providing a more efficient and adequate health service for the people of Indiana, and this health service should be headed by medical men rather than nurses or laymen. He again urges that all-time health officers be created and that those officers shall be well-trained medical men. He says that Indiana is falling far behind in public health work, not because of opposition to better health administration nor because the people of Indiana are not health-minded, but because our present law will not permit the organization of public health work on a sound and proven basis. On the contrary, the people of Indiana are demanding the best in both health service and medical service, and if this cannot be secured through the medical profession then efforts will be made to secure it in some other way. The physicians of Indiana do not want administrative public health work to be taken over by laymen, by lay organizations, by public health nurses, or by any other except the medical profession itself. However, the tendency is toward this very thing, and unless laws are secured under which public health administrations can be built around trained and experienced medical leadership, other laws are certain to be enacted that will make it possible for non-medical leadership to control and direct administrative public work in Indiana. Full-time public health units are approved and supported by the organized medical profession in every state in which they have been established, because they have demonstrated the helpfulness not only to the general public but to the medical profession as well. Secretary King is of the opinion that the present tendency in Indiana to have health matters controlled by public health nurses and laymen will go on and ultimately end in state medicine unless the medical profession awakens to its duties and firmly takes hold of the question and decides in favor of having everything pertaining to health matters absolutely controlled by the medical profession. We are inclined to agree with him, and we hope that at the next session of the Indiana State Medical Association some very pertinent action will be taken by the Association in support of movements to keep the health matters of the state in the hands of medical men.

A YOUNG physician recently called upon us for advice concerning a location for the practice of his profession. We were rather amused to hear him confidently say that the physician with good education, excellent training and upright character ought to succeed professionally as well as in a business way. We offered encouragement, for it is unkind to discourage a young man with laudable ambitions, but we could not help thinking that recognition on the part of the profession as well as the public often temporarily comes to the poorly trained and dishonest for it is a peculiar trait of human nature that in the selection of a physician many people look for personality, polite

manners, business or social connections and *not* to education, training, medical and surgical ability or integrity. Perhaps it may be said that the incompetents do not last long, and that their success is short lived, but there is always someone to fill the gap.

Not so many years ago a notoriously incompetent, self-opinionated and court-proved dishonest physician, having no connection with reputable medical societies, attempted to secure permission to take some of his patients to a high-grade hospital that at the time was largely under the control of ministers and church people. The staff had refused to sanction permission for the renegade to practice in the hospital, but the ministers on the board bolted and for the time being attempted, through testimony of church people, to show that the physician seeking preferment was considered one of the best-educated, best-trained, most-experienced and possessed the safest judgment of any physician in the community. In short, the renegade physician had courted church influence through regular attendance at all of the church services and liberal donations to church enterprises. Eventually the truth came to the surface and the unfair public learned that incompetence and dishonesty do not make a trustworthy physician, and the meteor-like success of the physician in question ended when a series of civil and criminal suits were entered against him.

What every young physician should learn is that the most satisfying success is that which comes with respect and confidence of medical profession and public alike. A big income means nothing if it is obtained unjustly and unfairly. In fact, lasting success is not obtained without constantly following the path of duty and honor. The physicians of unquestioned reputation and standing in the profession should preach this sermon to the younger physicians, many of whom are inclined to go astray in this era of commercialism and blunted morals.

SOME physicians in Indiana have kicked because they have not been awarded adequate fees in compensation cases. They are treated better than the physicians in Ohio, or better than they are when they have to settle according to Ohio's compensation laws in case the patient comes from across the line, but there are some states where compensation work receives fairly decent compensation. Colorado happens to be one of those states, and for the purpose of acquainting the Indiana physician with what is going on around him, we publish the fee schedule that the Colorado State Medical Association has offered for adoption by the State Industrial Commission and with very reasonable hope of having it passed. The schedule is as follows:

| | Proposed Fee |
|---|-----------------|
| Schedule: | |
| First visit to place of injury, etc..... | \$ 5.00 |
| Night | 5.00 |
| First office visit, including dressing..... | 2.50 |
| Subsequent visits, office or hospital, etc..... | 2.00 |
| Subsequent home visits, etc..... | 3.00 |
| Country mileage, one way, beyond city limits of incorporated towns | 1.00 |
| Assistant to surgeon at major operation..... | 15.00 |
| Assistant to surgeon at minor operation..... | * |
| General anesthetic | |
| (Change to read as follows:) | |
| Anesthetics for major operations: | |
| Ether and local..... | 15.00 |
| Gas | 15.00 |
| Spinal and sacral..... | 25.00 |
| Local anesthetic | 1.00 |
| FRACTURES | |
| Femur | \$150.00 |
| Patella | 50.00 |
| Clavicle | 50.00 |
| Radius or ulna..... | 50.00 |
| Radius and ulna..... | 100.00 |
| Humerus | 100.00 |
| One finger | 15.00 |
| Each additional finger..... | 15.00 |
| One toe | †25.00 |
| Each additional toe..... | †10.00 |
| Metacarpals (single or multiple)..... | 25.00 |
| Tibia | 75.00 |
| Fibula | 20.00 |
| Tibia and fibula | 100.00 |
| Ribs (one or more)..... | ‡25.00 |
| Metatarsals (single or multiple) (each)..... | 25.00 |
| DISLOCATIONS | |
| Hip | 75.00 |
| Wrist | 25.00 |
| Finger or toe..... | 5.00 |
| Shoulder (new dislocation)..... | 50.00 |
| Elbow or ankle..... | 50.00 |
| Knee | 75.00 |
| AMPUTATIONS | |
| Thigh, leg, ankle or foot..... | \$100.00 |
| Arm, forearm or hand..... | 100.00 |
| Finger or toe..... | 35.00 |
| Fingers or toes (2 or more)..... | 50.00 |
| Arm disarticulation at shoulder..... | 150.00 |
| Hip disarticulation | 250.00 |

*Eliminate item.

†Great toe.

‡Each other toe.

§Uncomplicated.

MISCELLANEOUS

All flat fees set forth for *fractures* shall apply to closed reduction without operation. For open operation and reduction, 150 percent of the flat fee shall be added.

All other paragraphs under "Miscellaneous" are satisfactory except the following, for which changes are recommended.

Hernia, radical operation and subsequent care, \$50.00, \$125.00.

Enucleation of eye and subsequent care, \$50.00, \$125.00 with implantation.

X-RAY

The X-ray Schedule is generally satisfactory. We recommend the following changes:

Increase all \$8.00 x-ray fees to \$10.00.

The fee for x-ray of the spine should be itemized more fully, and should read as follows:

| | |
|----------------------|----------|
| Lumbar spine | \$ 15.00 |
| Dorsal spine | 15.00 |
| Cervical spine | 15.00 |
| Pelvis | 15.00 |
| Entire spine | 35.00 |

Localization of foreign body in eye, including previous determination of the presence of a foreign body, \$25.00.

Stomach and intestines, including such preliminary plates as are necessary, \$35.00.

DEATH NOTES

JOHN J. FISHER, M.D., of Rossville, died July 22nd. Doctor Fisher graduated from the Bellevue Hospital Medical College, New York, in 1880.

S. G. KREIDER, M.D., of Plainfield, died July 19th, aged sixty-two years. Doctor Kreider graduated from the Ohio Medical University, Columbus, in 1896.

GEORGE W. TETER, M.D., of Boxley, died July 1st, aged sixty-three years. Doctor Teter graduated from the Physio-Medical College of Indiana, Indianapolis, in 1890.

MOLLIE KING, M.D., of near Union City, died July 18th, aged forty-two years. Doctor King graduated from the Indiana University School of Medicine in 1915. She was a member of the Randolph County Medical Society, the Indiana State Medical Association, a Fellow of the American Medical Association, and a member of the Associated Anesthetists of the United States and Canada.

C. M. MIX, M.D., of Muncie, died June 23rd, aged fifty-six years. Doctor Mix was chief of the surgical staff of the Ball Memorial Hospital. He was a member of the Delaware-Blackford County Medical Society, the Muncie Academy of Medicine, the Indiana State Medical Association, the American Medical Association and a Fellow of the American College of Surgeons. Doctor Mix graduated from Cornell University Medical College, New York, in 1902.

NEWS NOTES AND PERSONALS

THE north central branch of the American Urological Association will meet in Indianapolis in November.

DRS. W. P. GARSHWILER and A. F. WEYERBACHER have announced the association of Dr.

James F. Balch with them in the practice of urology in Indianapolis.

THE Porter County Medical Society held a meeting at Valparaiso, June 24th. Dr. G. H. Stoner, of Valparaiso, presented a paper the subject of which was "Pasteur: Man's Greatest Benefactor."

DR. H. O. MERTZ was made a member of the American Association of Genito-Urinary Surgeons at the meeting held at French Lick, Indiana, recently. Members are limited to about sixty, from the United States and Canada. It is a constituent body of the American Congress of Physicians and Surgeons.

THE Jefferson County Medical Society held a meeting at Madison, Indiana, June 19th. Dr. G. W. Milligan, superintendent of the State Hospital at Madison, presented a paper concerning mental hygiene, including a report on the recent meeting of the International Society of Mental Hygiene held at Washington, D. C.

THE U. S. Civil Service Commission announces open competitive examinations for chief nurse (Indian Service); head nurse (Indian Service); graduate nurse (various services); graduate nurse, visiting duty; and graduate nurse, junior grade (various services). Applications for the positions must be on file with the Civil Service Commission at Washington, D. C., not later than December 30, 1930. Full information may be obtained from the Commission.

THERE will be a meeting of the Garvan Cancer Research Laboratory (of the Surgical Pathological Laboratory of Johns Hopkins University) in the ballroom of Belvedere Hotel, Baltimore, Maryland, September 15, 16 and 17. During these days there will be lantern-slide demonstrations, on the diagnosis and treatment of diseases and tumors of bone. Because of the size of the ballroom the number must be limited to 800. The first day will be devoted to fundamental and essential knowledge of benign and malignant lesions of bone difficult to diagnose. Any member of single bones will be discussed; the third day will be reserved for the presentation of rare lesions of bone difficult to diagnose. Any number of the medical profession attending this meeting may register such a case by addressing Miss Maude Walker, Surgical Pathological Laboratory, Johns Hopkins Hospital. Any member of the medical profession interested in the diagnosis and treatment of lesions of bone is invited. Complete information concerning this session may be obtained by writing to Miss Walker, as mentioned above.

BECAUSE of differences in regulations governing quarantine for the various communicable diseases

in the adjacent states of Michigan, Ohio and Indiana, there always has existed considerable confusion in counties and cities bordering on the state lines and physicians and health officers have found it quite difficult to enforce quarantine regulations because these regulations differed on different sides of imaginary state lines. In order to eliminate these difficulties by the adoption of uniform quarantine regulations, the state health commissioners of the three states held a conference at Potawatomi Inn, Pokagon State Park, Lake James, July 14th and 15th. The conference was attended by Dr. Charles A. Neal, State Director of Health; Charles E. Bauman, Assistant Director, and Doctor Vanosdoll, Director of Division of Communicable Diseases of the State Health Department of Ohio; Dr. C. C. Slemmons, State Health Commissioner, and Dr. C. C. Young, Chief of the Laboratory Division of the Michigan State Health Department, Dr. A. J. Hostetler, President, and Dr. William F. King, Secretary of the Indiana State Health Department.

As a result of the conference, practically uniform regulations and requirements for quarantine, for release from quarantine and for the control of contacts and carriers were agreed upon and adopted and will become official in each of the three states within a short time.

In addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Carel Laboratories:

Alpha-Naphco.

Maltbie Chemical Co.:

Ephedrine Nasal Jelly-Maltbie.

Mead, Johnson & Co.:

Mead's 5 D Cod Liver Oil with Viosterol.

Merck & Co., Inc.:

Pyridium:

Aqueous Solution of Pyridium, 1 percent.

Pyridium Tablets, 0.1 gm.

Pyridium Ointment, 10 percent.

H. A. Metz Laboratories, Inc.:

Elixir of Pyramidon.

Pyramidon Tablets, 1½ grains.

National Drug Co.:

Ragweed Pollen Antigen-National.

Timothy Pollen Antigen-National.

Parke, Davis & Co.:

Ephedrine Hydrochloride-P. D. & Co.:

Capsules Ephedrine Hydrochloride-P. D. & Co., ⅜ grain.

Capsules Ephedrine Hydrochloride-P. D. & Co., ¾ grain.

Thio-Bismol:

Ampoules of Thio-Bismol.

Pitman-Moore Co.:

Siomine:

Siomine Capsules, ½ grain.

Siomine Capsules, 1 grain.

Siomine Capsules, 2 grains.

Siomine Capsules, 5 grains.

G. D. Searle & Co.:

Ampules Mercurochrome-H. W. & D., 1% 10 cc.

Ampules Mercurochrome-H. W. & D., 1% 20 cc.

Nonproprietary Article:

Alphanaphthol.

INDIANA UNIVERSITY NEWS NOTES

ONE hundred and thirty-six students have matriculated in the Indiana University School of Medicine for the fall semester, according to Dr. B. D. Myers, dean at Bloomington. Seven of these are women. This is the largest enrollment ever accepted, and only ten schools in the country have enrollments this large, according to Dean Myers.

Applicants are selected on a scholarship basis. More than 500 applications have been received, but no more are being considered because the class is full.

IMPORTANT features and facts about the Indiana University Medical School, including courses of study, graduate work, requirements for admission and graduation and description of school buildings, hospitals, and dispensaries, are contained in a bulletin of the medical school for 1930-31. A register of students for 1929-30 and graduates from the school in 1929 are listed.

Thirteen departments are offering courses for next year with eight departments giving work which leads to the A.M. or Ph.D. degrees, the bulletin states. A six-year course leading to the B.S. and M.D. degrees or a seven-year course leading to the A.B. and M.D. degrees may be taken by students enrolled in this school. The three organizations allied with the medical school, the Training School for Nurses, the Department of Dietetics and the Social Service Department, are described in the new bulletin.

THE executive committee of the James Whitcomb Riley Hospital for Children, Indianapolis, have announced that within a short time the committee would begin the expenditure of a fund of approximately \$1,000 known as the "Bobby Jones fund." This fund has been held by the committee since 1926 and it will be expended on the playground of the institution. A permanent part of the playground will be developed in a special way and will bear the name of the famous Atlanta golfer who raised the fund.

The exact form which the memorial will take has not been determined by the members of the committee. Olmstead Brothers, landscape engineers for the Riley committee, have made several recommendations in the general survey of the development of the grounds surrounding the Riley hospital and particularly the proposed play-

ground. It is possible that eventually a miniature golf course, which would offer splendid opportunities for exercise for convalescent children, may be put into the general playground scheme and bear the name of the famous champion.

The committee came into possession of the fund as a result of two exhibition matches played by Jones in July, 1926, at the Highland Golf and Country Club. The exhibition matches were arranged at the suggestion of the club. All the proceeds of the matches were given to the Riley Hospital for Children.

Forty-nine girls from all parts of the state have received appointments to enter the September class of the Indiana University Training School for Nurses, Indianapolis, according to the announcement of Mrs. Ethel P. Clarke, director of the training school. The total enrollment for the I. U. nurses' school usually runs around 175 students, Mrs. Clarke said.

Members of the faculties of the I. U. School of Medicine, of the training school for nurses, and of the College of Arts and Sciences of the University conduct the courses, while the Indiana University hospitals, Long, Riley and Coleman, provide the nurses' practical experience. Upon completion of a three-year course, the students entering in September will be granted the diploma of graduate nurse.

The students who have passed the entrance requirements successfully for admission to the training school in September are as follows:

Mary Dean Aspy, Margaret Bixler, Patricia Gray and Rosemary Lautif, Indianapolis; Beula Barker, Plainfield; Ruth Conner, Waynetown; Marie Culbertson, Vevay; Helen Davies, Frankfort; Edythe John, Manilla; Beatrice Vile, Kingman; Irene Green, El Nora; Caroline Henderson, Montpelier; Frances Lantz, New Palestine; Florence Leshner, Union City; Mary E. McLin, Bicknell; Reva Oaks, Evelyn Niccum, and Fern Waggoner, Flora; Pearl Thrasher, Milroy; Frances Walker, Terre Haute; Alice L. Brettschneider, Gary; Kathryn Pierce, Delphi; Mary Cree, Logansport; Leolia Black, Mary E. Burns and Rachel Stone, Crawfordsville; Mildred A. Dean, Lawrenceburg; Constance Earle, Bloomington; Lois H. Friedl, Princeton; Belva Grubb, Southport; Mary King, Economy; Alice Creager, and Kathryn Holland, Washington; Evelyn Fry and Ruth Hubler, Galveston; Edith Graft, Winchester; Helen Stallsmith, Huntington; Mary Terhune, Richmond; Ruth Abercrombie, Connersville; Dorothy Ball, Wabash; Mary Cook, Doris L. Yakey, and Mary E. Gardner, Camden; Louise DeMotte, Westfield; Marjorie Yount, Trafalgar; Elizabeth Bone, Kokomo; Kathryn Derry, Jeffersonville; Virginia Hering, Shelbyville; and Lucille Roush, Anderson.

INTERNESHIPS in various hospitals throughout the United States, in Canada, and in the Canal

Zone have been received by graduates of this year's class of the Indiana University School of Medicine, according to the complete list announced here. According to the list 99 of the 102 members of this year's class have been granted internships and the other three have not as yet decided where they will be located. The internships which have been received by the young I. U. doctors are in thirteen states in addition to Canada and the Canal Zone. They are in Indiana, Missouri, Wisconsin, Massachusetts, Michigan, Ohio, Minnesota, Illinois, California, Oregon, Texas, Pennsylvania and Kansas.

Sixty-three of the doctors will do their interne work in Indiana hospitals, including twenty-six at the City Hospital of Indianapolis; twelve at the Methodist Hospital of Indianapolis; eleven at the Indiana University Hospitals, including the Riley, the Long, and the Coleman Hospitals; four at St. Joseph's Hospital of Fort Wayne; two at St. Vincent's Hospital of Indianapolis; two at the Lutheran Hospital of Fort Wayne; two at St. Elizabeth's Hospital of Lafayette; two at the Epworth Hospital of South Bend; one at St. Margaret's Hospital of Hammond, and one at the Walker Hospital of Evansville.

Hospitals outside of Indiana where more than one of the I. U. graduates will be located are as follows: San Diego County General Hospital of San Diego, California, three; Henry Ford Hospital of Detroit, Michigan, three; United States Naval Hospital of San Diego, California, two; the United States Marine Hospital at Chicago, Illinois, two; and the Lucas Hospital of Toledo, Ohio, two. These appointments to internships are secured largely through competition with students of other medical schools.

The complete list is as follows:

City Hospital of Indianapolis: Daniel C. Barrett, Indianapolis; Edwin Boots, Terre Haute; Marcel S. Brown, Sullivan; Andrew F. Sonnoy, Indianapolis; Russell M. Decker, Brazil; Myers B. Deems, Huntington; Calvin B. Fausset, Pendleton; Robert Flinn, Marion; Lloyd Foltz, Indianapolis; Stanley Gordin, Indianapolis; John W. Hendricks, Columbus; Bernard Hyman, Indianapolis; Haldon C. Kraft, Noblesville; James R. McLaughlin, Velpen; George E. Moses, Switz City; Louis T. Need, Indianapolis; Lowell Painter, Garrett, Samuel Perlman, Indianapolis; Harry S. Rabb, Indianapolis; Ben Raney, Linton; Phillip B. Reed, Indianapolis; John D. Rogers, Gosport; Robert Staff, Terre Haute; L. Allen Stamper, Springport; Lowell R. Stephens, Southport; Everett Williams, Indianapolis.

Methodist Hospital at Indianapolis: Max Blue, Claypool; John F. Kerr, Jr., Indianapolis; James J. Kistler, LaPorte; Paul Lamey, Anderson; John Lansford, Jasper; George A. McDowell, Logansport; John C. Miller, Indianapolis; Ernest B. Norris, Indianapolis; James Pebworth, Indianapolis; Emil W. Scheier, Indianapolis; Morris C.

Thomas, Westfield; Fred Wilson, Prairie Creek; and Chester S. Laubscher, Evansville.

Indiana University Hospitals at Indianapolis: Max R. Adams, Holton; Carroll A. Burroughs, Lowell; Joseph D. Coate, Muncie; Leon Garrison, Summitville; Warren Hickman, Logansport; Ernest Mock, Huntington; Ralph S. Sappenfield, Indianapolis; W. Leland Sharp, Greenwood; Tylor Stroup, Indianapolis; Robert G. Thayer, Indianapolis; Crawford Baganz, Indianapolis.

St. Joseph's Hospital of Fort Wayne: Harry C. Harvey, Marion; Howard Handa, Peahi, Maui, Hawaii; John R. Hurley, Daleville; George H. Overpeck, Rosedale.

San Diego County General Hospital of San Diego, California: James M. McBride, Zanesville; James W. Ravenscroft, Indianapolis; Byron Zaring, Brownstown.

Henry Ford Hospital of Detroit, Michigan: James E. Graham, Boonville; Wilford D. Nusbaum, Cass; Russell Sanders, Centerville.

St. Vincent's Hospital of Indianapolis: Richard Appel, Indianapolis; Jay Thom, Franklin.

United States Naval Hospital at San Diego, California: John C. Troxel, Elkhart; Albert Held, Lamar.

Lutheran Hospital of Fort Wayne: Edwin W. Dyar, Ossian; Lester Eberhart, Huntington.

Lucas County Hospital of Toledo, Ohio: Harold Ropp, Glezen; Russell E. Miller, Rochester.

Epworth Hospital of South Bend: Harold Ringer, Rockport; Quentin Stultz, Zionsville.

St. Elizabeth's Hospital of Lafayette: George L. Derhammer, Huntington; Wayne G. Pippen-ger, North Liberty.

United States Marine Hospital at Chicago, Illinois: Park Huffman, South Whitley; Leroy E. Burney, Indianapolis.

John E. Alexander, Evansville, St. Louis City Hospital No. 1 of St. Louis, Missouri; Robert L. Amos, Kendallville, Wisconsin General Hospital of Madison, Wisconsin; Cecil Andrews, Greenfield, United States Naval Hospital at Boston; Wilbur Bond, Greensfork, City Hospital of Springfield, Ohio; James C. Brown, Burnettsville, Ancker Hospital of St. Paul, Minnesota; Anderson J. Chandler, Indianapolis, Kansas City Hospital No. 2 at Kansas City, Missouri; Donald L. Colglazier, Salem, Montreal General Hospital of Montreal, Canada; John Ewing, Evansville, Los Angeles County General Hospital of Los Angeles, California; Maurice S. Fox, Freelandville, Methodist Hospital of Southern California at Los Angeles, California.

Otto P. Hannebaum, Indianapolis, U. S. Marine Hospital of San Francisco, California; Robert A. Hedgecock, Frankfort, Good Samaritan Hospital of Portland, Oregon; John E. Hartsaw, Indianapolis, Gorgas Hospital of Ancon, Canal Zone; Bowen Hoover, Boonville, Parkland Hospital of Dallas, Texas; Jefferson F. Klepfer, Fortville, United States Public Health Service of

Chicago, Illinois; Ralph Leser, Bloomington, Philadelphia General Hospital of Philadelphia, Pennsylvania; Clifton Merritt, Orland, Blodgett Memorial Hospital of Grand Rapids, Michigan; Harold Petitjean, Haubstadt, Walker Hospital of Evansville.

Harry Riemer, Cleveland, Ohio, Mt. Sinai Hospital of Cleveland, Ohio; Anthony Riofski, Nanticoke, Pennsylvania, the Mercy Hospital of Wilkes-Barre, Pennsylvania; William Schoolfield, Grandview, Wesley Hospital of Wichita, Kansas; R. Lee Smith, Versailles, St. Elizabeth's Hospital of Dayton, Ohio; Urban F. D. Stork, Evansville, Milwaukee Hospital, Milwaukee, Wisconsin; Richard E. Stout, Bloomington, Cleveland City Hospital of Cleveland, Ohio; Charles F. Willis, Evansville, St. Margaret's Hospital of Hammond; and Marcus E. Wyant, Noblesville, St. Mary's Hospital of Madison, Wisconsin.

SOCIETIES AND INSTITUTIONS

THE FORT WAYNE SESSION

The eighty-first annual session of the Indiana State Medical Association will be held at Fort Wayne, September 24, 25 and 26, 1930. Official headquarters will be at the Hotel Anthony, where most of the commercial and scientific exhibits also will be held.

According to present plans, the annual golf tournament will be held Wednesday morning, September 24th, at the Fort Wayne Country Club, followed by luncheon, at which the golfers are to be guests of the Lincoln Life Insurance Company, of Fort Wayne. The Council will hold a luncheon meeting at eleven o'clock on Wednesday.

The general scientific meetings will be held Wednesday afternoon and Thursday afternoon. Scientific sections will hold meetings on Thursday morning.

The first meeting of the House of Delegates will be held at 5:30 p. m. Wednesday, September 24th, at the Anthony Hotel. This will be a dinner as well as a business meeting.

A special program of entertainment is being arranged details of which will be announced in the September issue, a theater party for the physicians and their wives being scheduled for Wednesday evening, and a meeting for the public on Thursday evening.

The program committee announces the following papers:

"The Lateral Pyelogram," by H. O. Mertz, M.D., Indianapolis.

"Some Eye Conditions in Children of Interest to the General Practitioner," by Walter R. Parker, M.D., Detroit.

Paper (title to be announced later), by James B. Herrick, M.D., Chicago.

"Compensable Hernia," by H. W. Garton, M.D., Fort Wayne.

"Injection Treatment of Varicose Veins," by Cleon A. Nafe, M.D., Indianapolis.

"Tumors of the Colon," by Walter H. Baker, M.D., South Bend.

"Some Surgical Complications," by A. C. Arnett, M. D., Lafayette.

"Joint Surgery," by E. B. Mumford, M.D., Indianapolis.

"End Results of Bone Tuberculosis," by R. A. Millikin, M.D., Indianapolis.

"Zinc Ionization in Treatment of Sinusitis," by Carl B. Sputh, M.D., Indianapolis.

"Treatment of Cataract Cases by Lens Extract," by Edward A. Pape, M.D., Indianapolis.

"Some Reasons Why the Dentists and the Otolaryngologists Should Become Better Acquainted," by F. J. Spilman, M.D., Connersville.

"Practical Refraction," by Chas. J. Adams, M.D., Kokomo.

"The Systemic Effect of Nasal Hyperplasia as It Affects the Nasal Ganglion," by H. A. Van-Osdol, M.D., Indianapolis.

"State Medicine," by Roscoe Beeson, M.D., Muncie.

"Diseases of the Colon," by Fred W. Rankin, M.D., and Jacob A. Bargen, M.D., Rochester, Minnesota.

Paper on obstetrics, speaker to be named.

"Practical Points on Infant Feeding," by Isadore Raphael, M.D., Evansville.

INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

June 18, 1930.

Meeting called to order at 4:00 p. m.

Present: Wm. N. Wishard, M.D., chairman; C. P. Emerson, M.D., J. H. Stygal, M.D., and Thos. A. Hendricks, executive secretary.

Minutes of the meeting held June 10th read, corrected and approved.

The release, "Those Hectic Hiccoughs," approved for publication in Saturday afternoon papers, June 28th, and in other papers thereafter.

Radio release, June 21st, "Those Hectic Hiccoughs." Report on medical meeting:

June 5—Fountain-Warren County Medical Society, Covington, Indiana, "Some Newer Things in Obstetrics."

Request for speaker:

July 2—Grant County Medical Society, Marion, Indiana. Joint meeting with the dentists. Speaker selected to talk on focal infection.

Correspondence from the Council on Medical Education and Hospitals of the American Medical Association in regard to Martinsville sanatoria brought to the attention of the Bureau.

Clipping of articles appearing in papers regarding the work of the State Diphtheria Committee reviewed.

The following letter was received from the Director, Educational Reference, Department of Public Instruction, State of Indiana, Indianapolis:

"Your letter of recent date has been referred to this Division for reply.

"We appreciate your energetic offer of the services of your weekly health bulletin of the Bureau of Publicity of the Indiana State Medical Association. We shall be

glad indeed to include items from this bulletin in our monthly issue of *The Indiana Education News*. Kindly address copies to me."

The following letter was received from the executive secretary of the Indiana Parent-Teacher Association:

"Our Parent-Teacher Bulletins are just now discontinued for the summer. We shall therefore be unable to use the medical releases during the summer months.

"Will it be possible for you to furnish these to us again next year, beginning with next October? We shall be very glad to have them if it is possible."

The executive secretary was instructed to write the executive secretary of the Parent-Teacher Association thanking her for her splendid help and cooperation during the year.

Letter received from THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION in regard to the reported suppression by the Christian Scientists of Edwin Franden Dakin's biography of Mary Baker Eddy, entitled "The Biography of a Virginal Mind."

Letter received from a Chicago physician in regard to the national movement "to promote the use of exhibition trains for public education in cancer, heart, venereal and public health subjects." Secretary instructed to refer this letter to the American Medical Association.

Further correspondence in regard to a former member of the faculty of a school of dentistry was received.

Forms were distributed to county medical societies for reporting medical meetings. Twelve of these have been returned. The secretary of each county society has been supplied with sufficient forms for the summer needs. These reports will be made in duplicate at the headquarters office and one for each meeting will be supplied to *The Journal of the American Medical Association* and THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION.

Health Committee report of the New York State Medical Society given to one member of the Bureau for study.

The following bills were approved for payment:

| | |
|-------------------------------------|----------|
| O. R. Brown Paper Co..... | \$ 14.00 |
| Central Press Clipping Service..... | 5.00 |
| Chas. P. Emerson, M.D. | 2.64 |
| O. A. Turner, M.D. | 2.50 |

\$ 24.14

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole July 1, 1930.

July 1, 1930.

Meeting called to order at 3:00 p. m.

Present: Wm. N. Wishard, M.D., chairman; C. P. Emerson, M.D., by proxy, and Thos. A. Hendricks, executive secretary.

Minutes of the meeting held June 18th read, corrected and approved.

A resolution on the death of Dr. Harvey Wiley was to be prepared for publication as a regular newspaper release in Saturday morning papers, July 5th, and in other papers thereafter.

Radio releases:

June 28—"Lock Jaw Weeks."

July 5—"Comments on Dr. Harvey Wiley."

Meetings to be held:

July 2—Grant County Medical Society, Marion, Indiana. Joint meeting with the dentists. "Focal Infection." Speakers obtained.

Letter received from the secretary of the Indiana State Health Council asking for the opinion of the Indiana State Medical Association concerning the establishment of an Indiana organization for the American Hygiene Association. Answer of the Bureau follows:

"Replying to yours of June 12th, I am reporting that the question of organizing a state association or committee

on social hygiene to which you refer was presented to the Bureau of Publicity of the Indiana State Medical Association at its regular meeting on June 18th.

"Replying to the five questions you submit, I have to report that after discussing the subject the Bureau is clearly of the opinion that such an association or committee is not needed and should not be created.

"The Bureau is further of the opinion that such efforts as have been made in this direction, notably in New York and other eastern states, have not accomplished the good anticipated and that the inevitable tendency of the attempt to teach social hygiene, or more properly speaking sex hygiene, has led to the unwise and harmful discussion of sex ethics. The rightly intended efforts in this direction instituted some twenty-five or thirty years ago gradually have led to a misdirection of the original purpose. Talks to groups of young people usually have included a discussion of sex ethics and have led to a deplorable familiarity with and emphasis upon sex relations, and have not contributed to the moral and cultural development of our young people. There is, in the opinion of the Bureau, a definite limit to the extent to which even parents should go in this matter.

"As a result of inaccurate and unwise discussion, sex hygiene, sex ethics, and even contraception, have become topics of current discussion in our magazines and newspapers.

"Few persons are competent to discuss sex hygiene without the discussion leading by the influence of suggestion to intimate and perverted interpretations in the minds of young people."

In accordance with the instructions received at the June 18th meeting of the Bureau, a letter was written to the executive secretary of the State Parent-Teacher Association, thanking her for her splendid help and cooperation during the year in the distribution of the releases of the Bureau.

In answer to the request of the Bureau of Publicity for information in regard to the national movement sponsored by a Chicago physician "to promote the use of exhibition trains for public education in cancer, heart, venereal and public health subjects," the following letter was received from the Bureau of Investigation of the American Medical Association:

"We had no record of a James L. Smith at Room 600, 100 North LaSalle Street, Chicago. I therefore asked my assistant to go to that address and see what he could find. It appears that this is an office of the 'General Organization Company,' which is described in the telephone directory as giving 'financial service.' I then called up the General Organization Company, asked to talk to Doctor Smith, and when I got him on the 'phone, asked him whether he was James Lawrence Smith, the only man that seemed to fit the initials. He stated that he was.

"According to our records, James Lawrence Smith was born in 1881, holds a diploma from the University of Illinois College of Medicine for 1904, and was licensed in Illinois the same year. He is not a member of the Chicago Medical Society nor a Fellow of the American Medical Association. I understand that Doctor Smith was previously, if he is not still, connected with H. G. Fischer & Company, makers of physical therapy apparatus and x-ray machines. He claims to know Doctor West, but unfortunately Doctor West is out of the city, so that I am unable to check up on this claim.

"We have nothing of a derogatory character regarding Doctor Smith.

"I asked Doctor Smith how he expected to finance such a movement as is outlined in his letter to you, and he said he knew of two or three persons of means that he thought he might interest in the matter, provided the medical profession looked favorably on his proposed project."

The following bill was approved for payment:
Curtis 1000, Inc. \$27.01

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole July 8, 1930.

July 8, 1930.

Meeting called to order at 3:00 p. m.

Present: Wm. N. Wishard, M.D., chairman; J. H. Stygall, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held July 1st read, corrected and approved.

The release upon "Chiggers" approved for publication in Saturday afternoon papers July 19th.

Radio release, July 12th, "Chiggers."

The Better Business Bureau Bulletin of July 3rd brought to the attention of the Bureau. The article in the Bulletin upon the work of the Federal Trade Commission against fraudulent advertisers was especially noted by the Bureau. Under the heading, "Cure and Treatment of Disease Is Basis for Misleading Advertising Copy," the Bulletin reads as follows:

"That the treatment and cure of human ailments form the basis of a large volume of the false and misleading advertisements appearing in some current American publications is apparent from the character of cases now being investigated by the Federal Trade Commission.

"At least seventy-five percent of the commission's cases of unfair advertising pertain to alleged cure-alls, devices for therapeutic treatment, and drug and toilet preparations, according to an estimate of the special board of investigation now at work on such cases.

"The total amount of newspaper space devoted to advertisement of medical products and toilet articles in 1929, according to a survey conducted by the Bureau of the Census in fifty representative cities, was 81,146,000 lines, which was only exceeded by the volume given over to passenger automobiles (81,415,000 lines), and to financial advertising (88,073,000 lines).

"In addition to medical and toilet article advertising in these fifty cities, foods and beverages were advertised to the extent of 74,241,000 lines in 1929, which brings the grand total of advertising of articles or services directly affecting the health of the consumer in these fifty cities to 155,837,000 lines, surpassing the volume of advertising purchased for any other classification, including that of automobiles, tires and accessories combined.

"The Survey of Current Business for January, 1930, issued by the Department of Commerce, reports the following expenditures for national advertising during the calendar year 1929:

| | |
|-------------------------------------|---------------|
| General magazines..... | \$203,776,077 |
| Farm magazines..... | 11,092,342 |
| Radio broadcasting (11 months)..... | 16,760,851 |

Total\$231,629,270

"Of this total, \$64,260,218, or 27.7 percent, was expended to advertise products which directly affect the health of the consumer, namely, drugs and toilet articles, \$35,987,386, and foods and food beverages, \$28,272,832. These are minimum figures as the survey included only leading monthly and weekly magazines and representative farm magazines and excluded all local advertisements and advertisements of less than fourteen agate lines."

The secretary was instructed to send the release of the Bureau, "A Hoosier Crusader" (published as an editorial in this issue of THE JOURNAL), to Mrs. Harvey Wiley, of the Bureau.

This was to be prepared and signed by each member of the Bureau.

Suggestions were made for the annual report of the Bureau for the annual session in September.

The following bills were approved for payment:

| | |
|-------------------------------------|---------|
| Central Press Clipping Service..... | \$ 5.00 |
| A. B. Dick Company..... | 3.50 |

\$ 8.50

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole July 15, 1930.

July 17, 1930.

Meeting called to order at 4:00 p. m.

Present: Wm. N. Wishard, M.D., chairman; J. H. Stygall, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held July 8th read, corrected and approved.

The release upon "Sunlight, Suntan and Sunburn" approved for publication in Saturday papers July 26, 1930, and all papers thereafter.

Radio release, July 19th, "Sunlight, Suntan and Sunburn."

The Better Business Bureau Bulletin of July 17th in regard to the investigation and complaints of the Tricho System brought to the attention of the Bureau. The article in part follows:

"Advertised as a safe, sure and scientific method for the removal of superfluous hair, an apparatus known as the 'Tricho System' has been installed in offices located in many of the large cities of the United States, including Indianapolis, and a number of Canadian municipalities. Medical authorities consulted by our National Bureau have pronounced the apparatus as highly dangerous when used for the purposes advertised. Supporting this authority are the records of more than twenty women who have complained to the New York City Department of Health of having been burned badly or otherwise disfigured by the Tricho Treatment, thirty cases of injury reported in the *Journal of the American Medical Association* and nearly a dozen complaints to the National Bureau.

"The machine, according to its proponents, functions by emitting a ray which finds its way along the hair shaft to the hair papilla, destroying the papilla by causing it to dry up." According to a statement attributed to Dr. Albert C. Geyser, reputed inventor of the apparatus:

"The Tricho wave positively devitalizes and destroys the hair papilla. The hair then falls out, not singly but over the entire treated area. There is no sensation or discomfort. The treatment leaves the skin soft and smooth—unmarked."

"Endorsed by the American Association for Medico-Physical Research.

"In support of the claims made, Tricho advertising has set forth a report from a committee of the American Association for Medico-Physical Research endorsing the machine. 'The endorsement of a committee of such high standing is a sufficient guarantee as to the factor of safety,' a Tricho booklet states.

"According to the American Medical Association, the American Association for Medico-Physical Research was organized by 'the outstanding quack of the century,' Albert Abrams, and was originally called the American Association for Spondylotherapy. A number of its members were among those testifying to the therapeutic value of the electro-magnetic belt, "Theronoid."

"Albert C. Geyser, M.D., reputed inventor of the Tricho System, is credited with being associate editor of the *Journal of the American Association for Medico-Physical Research*.

"Is the Tricho System an X-ray?"

"In addition to the endorsement by the Association above named, Tricho literature has claimed: 'The machine also has been examined by the Division of Institutional Inspection of the Board of Health of the City of New York and pronounced—safe.' This purported endorsement, the Department of Health advises us, has no reference whatsoever to the safety with which the machine can be used on humans. It merely means that a license was issued to the effect that the installation of the machine in the New York office was made in accordance with the fire laws and that the machine was safe as far as its location was concerned.

"The issuing of this license has an interesting bearing

on the question whether the Tricho System is an x-ray machine or not.

"Tricho literature, discrediting other methods of removing superfluous hair, has made a particularly virulent attack on the x-ray. In words attributed to Doctor Geyser: 'Owing to the fact that it is composed of so many different wave lengths, it so often is dangerous even in the hands of experts, when used to remove hair. It is mentioned only to be condemned.'

"The Tricho Sales Corporation, formerly national distributor of the machines, admitted to the Bureau that the Tricho System is an adaptation of the x-ray but claimed that, by the use of aluminum filters, the harmful rays of the x-ray which burn and dry the skin, practically are eliminated.

"The Sanitary Code provides that an x-ray machine operated in New York City must be registered with the Department of Health. When the Department began to receive complaints from women who claimed to have been burned and disfigured by the Tricho System, the proprietors of the New York Tricho office were summoned to register their apparatus. Electrical experts and physicists consulted by the Department were of the unanimous opinion that the machine was nothing more than an x-ray. After some objection, Doctor Geyser applied to the Department for an x-ray permit.

"A further investigation of this subject was made by the Better Business Bureau of Dallas, Texas, which appointed a committee comprised of one physician, one x-ray specialist and one expert engineer to conduct a series of tests with a Tricho machine. The committee concluded that the apparatus was only an adaptation of the x-ray; that the claim that the harmful rays were eliminated was incorrect; that the use of the machine by unskilled persons might result in serious harm to patients.

"Injuries and Dissatisfaction Reported by Patients:

"Some complaints against the Tricho System have come from persons who claimed that, although they had been lead to believe that with a relatively few treatments they would be permanently freed from superfluous hair, the desired results had not been obtained although the treatment had been continued over a period of two years or more.

"The majority of the complaints, however, come from people who claim to have been injured by the Tricho System. As previously stated, the National Better Business Bureau has been advised of many such cases.

"An insidious peculiarity of many of the injuries reported is that the harmful effects do not become noticeable until months and sometimes more than a year after the discontinuance of the Tricho treatment.

"Injuries reported are ulcers, scars, wrinkles and sagging skin as a result of disintegrated muscles, inflammation, atrophy, etc.

"A number of suits have been instituted against Tricho operators by those suffering injury and on one occasion at least, damages were awarded."

A letter was received from Mrs. Harvey W. Wiley expressing appreciation for the tribute paid by the Bureau of Publicity to her late husband, Doctor Wiley.

Report of medical meeting of the Cass County Medical Society on April 23rd received.

Letter received from the president of the Lafayette Pharmacal, Inc., in regard to survey made by Allon Peebles in Shelby county on behalf of the Committee on the Cost of Medical Care. Secretary instructed to refer writer direct to the Committee on the Cost of Medical Care.

Three booklets received from the Department of Public Health of Mexico. The secretary was instructed to acknowledge these booklets.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole July 22, 1930.

July 22, 1930.

Meeting called to order at 4:00 p. m.

Present: C. P. Emerson, M.D.; J. H. Stygall, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held July 17th read and approved.

The release upon "Tree Sitting" reviewed and approved for immediate publication.

Radio release, July 26th, "Tree Sitting."

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole July 29, 1930.

INDIANA STATE BOARD OF HEALTH DIVISION OF COMMUNICABLE DISEASES

MONTHLY REPORT, JULY, 1930

Morbidity reports from the health officers of the state show a marked decline over the previous month, except typhoid fever, cerebro-spinal meningitis and poliomyelitis. Seventy-eight counties gave positive reports. There were 587 negative cards sent in. Smallpox was the most prevalent disease.

Typhoid Fever. A slight increase is shown, thirty-two cases. Twenty-eight last month. Nineteen the corresponding month the previous year. The normal expectancy is fifty-three cases. The expectancy is based on the experience of the last seven years, including epidemics. This is typhoid time. The disease will increase into autumn.

Cerebro-spinal Meningitis. Fifteen cases during the month. Fourteen cases the preceding month. The disease has shown a steady decline since the peak was reached in March of this year when eighty-nine cases were reported. The cases this month were distributed over eight counties. Marion county reporting six cases.

Poliomyelitis. There was an outbreak of the disease in Perry county during the month, sixteen cases being reported. Fifteen of these cases were in Tell City and one case in Cannelton. During January and February of this year three cases of the disease occurred, but no official report was made of them. Many of these cases were of a mild type, but all cases showed a certain degree of paralysis. A thorough investigation was made under the supervision of the Division. Cases were reported from Marion, Madison and Jasper counties, three, one and one, respectively. No cases were reported the previous month.

Smallpox. Sixty-two percent drop is noted—275 cases this month, 440 cases last month. The same month the previous year 166 cases. The estimated expectancy was 161 cases. A coincidence: when smallpox declines, so will chickenpox. Forty-four cases of this disease this month, 169 cases the previous month. There must be some association with these two diseases. Vaccination against smallpox will reduce the prevalence of chickenpox, as well as smallpox.

Scarlet Fever shows a marked decrease over the previous month—122 cases as against 260 cases last month; 160 cases the corresponding month the preceding year. Measles shares about the same reaction to the season as scarlet fever—148 cases of measles during the month and 530 cases the previous month. These two diseases are cold weather diseases and will not increase in prevalence until late autumn.

Diphtheria shows the season's decrease. Thirty-four cases this month and forty-three cases last month. Forty-four cases the same month last year. This shows a steady decline over the estimated period which is seventy-two cases.

Whooping Cough holds about the season's average—147 cases during the month, 148 the previous month. The corresponding month the preceding year 149 cases. The average for the last six years is 223 cases. This is a dangerous disease. It is not so considered by the great majority of families. Many cases are never seen by a physician and very few are quarantined. More deaths from whooping cough than scarlet fever or diphtheria, typhoid fever or measles. The records in the Division

of Vital Statistics, Indiana State Board of Health, show that in 1929, 181 deaths from whooping cough; diphtheria, 158; measles, 125; typhoid fever, 118, and scarlet fever, 106.

The name and number of diseases reported during the month not mentioned above are as follows: Tuberculosis, 245; influenza, five; pneumonia, one case; mumps, eleven; undulant fever, five; hydrophobia, two; impetigo bulbus, one case; malaria, four cases in Lake county; septic sore throat, one case, and one case of ophthalmia neonatorum.

Jamaica Ginger Paralysis. The only report of cases received was from Dr. D. R. Saunders, Health Commissioner of Johnson County and City Health Officer of Franklin. Doctor Saunders reported thirty-five cases from Franklin. The first case occurred March 15, 1930, and the last case was observed April first of this year. There has been a slight improvement in individual cases up to the present time. The majority of cases appear to be about stationary. The age and sex distribution: All males from eighteen years up to sixty-two years. No deaths.

H. W. MCKANE, M.D.,
Collaborating Epidemiologist,
U. S. P. H. Service,
Indiana State Board of Health.

WOMAN'S AUXILIARY TO THE AMERICAN MEDICAL ASSOCIATION DETROIT SESSION

The impression of definite progress and growing recognition, based on the oft-stated fact, "We build on those who go before," was evidenced at the eighth annual session of the Woman's Auxiliary to the American Medical Association, held in Detroit, Michigan, June 23-26, 1930. This impression began at the banquet of the Medical Veterans of the World War, Major General Merritte W. Ireland, surgeon general U. S. A., guest of honor, when the presiding officer, Col. John O. McReynolds, Texas, president, welcomed all, including members of the Woman's Auxiliary who were attending this affair for the first time. Doctor McReynolds spoke of the valuable assistance already rendered by this Auxiliary, and of the anticipated pleasure in the music of two members from Indiana, Mrs. Ralph Chappell, soprano; Mrs. F. W. Gregor, pianiste. Songs alternated with various addresses, including that of General Ireland and Dr. Aristides Agramonte, Havana, Cuba, the only surviving member of the Yellow Fever Commission of thirty years ago. It will be recalled that in January, 1929, the Woman's Auxiliary to the Indianapolis Medical Society honored a hero of the Spanish-American War, John R. Kissinger, when General Ireland himself read an address, "The Havana Experiment."

The meeting of the board of directors of the Woman's Auxiliary to the American Medical Association was called to order Monday afternoon, June 23rd, with the president, Mrs. G. H. Hoxie, presiding. After greetings routine matters were disposed of, the nominating committee, Mrs. Wayne Babcock, Pennsylvania, chairman, elected, and rules of the convention adopted. Following adjournment, the members were guests of the Woman's Auxiliary to the Michigan State Medical Society at a musicale-tea.

Tuesday forenoon the general business meeting was held in the Roof Garden, Hotel Tuller, Mrs. Hoxie presiding. In order came the invocation, the address of welcome by Mrs. Elmer L. Whitney, president of the Auxiliary to the Wayne County Medical Society; the response, by Mrs. John O. McReynolds, Texas, president of the Woman's Auxiliary to the A. M. A., 1927-28; the report of the committee of arrangements, by the chairman, Mrs. Basil L. Connelly, Detroit; then Mrs. Hoxie read the president's report, evidencing an almost incredible capacity for detailed service and an immense amount of work accomplished, especially along public health lines. It is hoped that this report can be printed and distributed. The treasurer, Mrs. F. L. Adair, now of Illinois, reported receipts of \$2,844, including \$467

from the former treasurer; balance, \$1,544.86; also, 10,220 paid members. In connection with this came the report of the chairman of finance, Mrs. James Blake, Minnesota, who presented on a blackboard an itemized list of expenditures within the \$1,700 budget, and the budget for 1930-31, totaling \$2,420. The chairman of organization, Mrs. F. W. Cregor, Indiana, quoted an old Chinese proverb, "One seeing is worth a hundred hearings" and arranged her report in "exhibits": First, a state file-book containing answers to questionnaires addressed to the presidents of all state auxiliaries, each state record accompanied by the state map, organized counties shaded; second, additions made to the large map drawn and shown in Portland, Oregon, by Mrs. A. T. McCormack, Kentucky, chairman of organization 1928-29; third, one thousand maps of the United States, $8\frac{1}{2} \times 11$, containing figures in the various states indicative of date of organization, auxiliary membership, A. M. A. membership; these figures standing side by side are a study in percentages and possibilities. Mrs. Cregor reported 10,220 paid members, 12,100 listed members in thirty-seven states, including the District of Columbia; isolated auxiliaries in two "border" states, Utah and Maine; ten "frontier" states, Washington, Montana, North Dakota, Nevada, Maryland, Vermont, Massachusetts, Rhode Island, Connecticut, New York. (These maps are available to all expressing a wish for them.) Drawing attention to the difference between the number of members and Fellows in the American Medical Association and the number of physicians in the United States, according to the report of the secretary and general manager of the A. M. A., Dr. Olin West, Mrs. Cregor said, "At least we Auxiliary members can see to it that our own husbands are Fellows." The fourth exhibit was called a "human interest story;" it was composed of answers to the query in the aforementioned questionnaires, "Can the National Auxiliary help your state in organization?" Mrs. Cregor bequeathed these plaints of "our sisters in distress" as a holy legacy to succeeding administrations, begging all to remember, however, that "we are pioneers, subject to all the discouragement and fatigue incident to pioneering, in an organization peculiar unto itself—an idealistic, altruistic organization; not a free-lance club wherein we are mistresses of our own development, but an Auxiliary subject to the suggestions and suppressions of the medical profession." After thanking all who made her report possible, Mrs. Cregor stated her recommendation, that "all women accepting office in this organization pledge themselves to answer letters promptly."

Mrs. James Blake, acting chairman of press and publicity, reported on the cooperation received from the editors of the thirty-two medical journals of the United States, to whom copies of study programs were sent; the number who published "Our Policy," "Our Program," and the eleven who printed the Detroit session program. Mrs. Blake read an editorial from the June issue of the *INDIANA JOURNAL*. A very interesting exhibit was made with clippings from various journals showing the amount of space given the Auxiliary. In this the leaders were California, Georgia, Kentucky and West Virginia. Mrs. A. B. McGlothlan, Missouri, chairman of *Hygeia*, reported over twenty thousand pieces of mail sent out in continuing the work of placing this health magazine in schools, colleges, clinics, all sorts of libraries, railroad trains, county courts, homes of legislators, and read excerpts from letters praising various features. *Hygeia* has a paid subscription list of 75,000 names; complete circulation, 85,000. Mrs. McGlothlan read also the report prepared by Mrs. M. P. Overholser, Missouri, chairman of public relations. This was an excellent piece of work outlining the attempts made to get in touch with women's organizations or clubs in which Auxiliary members carry on as individuals to emphasize that section of the Constitution which reads "to assist the medical profession in those organizations which look to the advancement of health and education." After the report by the "mother" of the Woman's Auxil-

iary to the American Medical Association, Mrs. S. C. Red, Texas, who distributed short histories of the first four years of the Auxiliary, the members adjourned to the luncheon in the Arabian Room, Hotel Tuller, where Mrs. Walter J. Freeman, president of the Pennsylvania Auxiliary, presided as toastmistress, and presented the guests of honor, Mrs. William Gerry Morgan, Mrs. Merritte W. Ireland, Dr. Malcolm L. Harris, president American Medical Association; Dr. William G. Morgan, president-elect A. M. A.; Dr. J. H. J. Upham, chairman Advisory Council from the A. M. A., and Dr. Charles H. Mayo, former president of the A. M. A. After Doctor Harris congratulated the Auxiliary on the "wonderful work you have done, and are doing," and Doctor Morgan said he keenly appreciated the opportunities for work in certain lines for the Auxiliary, one of which is "to try to guide and curtail and confine the activities of quasi-charitable organizations that are over-running the country," they were forced to leave to attend an executive session of the House of Delegates. Doctor Upham expressed himself as "happy to attend such a magnificent meeting and bring a message of good will from the board of trustees;" he hoped for a continuation of "fellow-workmanship" with the American Medical Association. Doctor Mayo developed the thought of the need of education to further preventive medicine—that the public must be educated to this need; that "wherever you find unorganized medicine you find all sorts of cults; where organized, there is someone then to take a place in educating the public;" that "the ladies have more responsibility in advancing civilization than the men;" that they must learn of the dangers which lie in unclean milk, insanitary conditions, bad teeth, focal infections, for "woman will get out and fight for her children and her friends' children," and "demand more for their children than you now do." "Save the children, educate the children, for education is not worth while unless it is applied." "The way to help pay for what you have received is to pass it on."

As Tuesday's program was national in character, Wednesday's was devoted to state needs; especial tribute was paid to Mrs. E. V. DePew, Texas, chairman of the Program Committee, for her untiring efforts in preparing and disseminating the study programs for county auxiliaries, particularly "The Most Common Defects in Children," "Organization and Program," "The County Health Unit." One state, Missouri, used two thousand copies of the first-named study. Only four state reports were read. It was voted to continue the reading of all state reports at the 1930-31 session. The chairman of the Credentials Committee reported 79 delegates, 20 alternates, 187 members, 98 guests; 54 Pennsylvania members registered. Mrs. Wayne Babcock, chairman of the Nominating Committee, presented the names of

Mrs. Southgate Leigh, Virginia, first vice-president;
Mrs. James Blake, Minnesota, second vice-president;
Mrs. V. W. Garrison, Arkansas, third vice-president;
Mrs. James F. Percy, California, fourth vice-president;
and

Mrs. A. B. McGlothlan, Missouri, president-elect.

After a rising vote of thanks to Mrs. Hoxie for her patience, efficiency, and devotion, this meeting was adjourned.

Thursday morning the post-convention board meeting was called to order by the new president, Mrs. J. Newton Hunsberger, Pennsylvania, presiding. Chairmen of standing committees were elected; discussion developed over plans and policies for the coming year; a round table for state presidents and committee members brought out many interesting views. The Board of Directors will meet again in November, in Chicago, at the same time as the Board of Trustees of the American Medical Association.

Respectfully submitted,

MRS. F. W. CREGOR.

TIPPECANOE COUNTY MEDICAL SOCIETY

Lafayette, Ind., June 12, 1930.

The Tippecanoe County Medical Society met in regular session, President McCay presiding. Dinner was served at 6:30 at Lincoln Lodge; twenty-one were present at the dinner.

At the close of the dinner the minutes of the May meeting were read and approved as read.

The resolutions committee, composed of Doctors Reser, Crockett and Campbell, presented resolutions upon the death of R. V. Hannell. Motion was made and carried that they accept the resolutions, placing one copy on file in the secretary's records and mailing the second copy to Mrs. Hannell.

Motion was made and carried that at the completion of the 1930-1931 program mimeographed copies be mailed to the various members of the society.

The report of the State Secretaries' meeting at the A. M. A. building in Chicago in April was made by the secretary.

It was also urged that the medical profession go on record as carrying out the annual physical examination, they taking the lead in the community. It would also be well to have teams for giving addresses organized so that they may be used any time they may deem necessary.

President McCay introduced Dr. D. C. McClelland, who presented the paper of the evening, the subject being "The Treatment of Uterine Hemorrhage with X-ray and Radium." Doctor McClelland's address was very well received by all present. It was very ably discussed by H. W. Sigmond and G. A. Collett, of Crawfordsville, and members of our local society. Doctor Sigmond emphasized the point that the x-ray is of value in treating amenorrhea as well as menorrhagia. Doctor McClelland emphasized the point that too often a family physician and the family pay too much attention to the old-lady idea that uterine bleeding at the time of the menopause will right itself and is a necessary happening. All bleeding which does not present a definite cause at first sight should be investigated very carefully. The point was also made that the x-ray does very little good, if any at all, in treatment of cases where there is pus. It is recommended highly for the treatment of erysipelas.

A rising vote of thanks was extended the speaker and the discussants for the excellent presentation of their subject.

A bill for cash meals of two dollars to Leon Howey was allowed.

Motion to adjourn was carried.

J. C. BURKLE, M.D.,
Secretary.

CORRESPONDENCE

"PLAYING TO THE GALLERIES"

Mitchell, Indiana, July 15, 1930.

Editor of THE JOURNAL:

Within the past month one of my patients consulted a specialist in internal medicine in Louisville and came back with a letter, addressed to the patient, giving a full report as to diagnosis, prognosis and treatment. The report went into detail as to the drugs to be employed, including dosage. Will you pardon me if I say that I am sore as hell, for it is not the first time such things have happened. Some specialists in Indianapolis do the same thing, and I ask you, is it right or is it fair to the family physician or even the patient? I have great respect for the ability of the city specialist, but I do not approve of his giving the patient a written detailed statement of the diagnosis and treatment of the case, whether I have referred the case or not. Putting drug treatment in the hands of patients has caused much self-prescribing and done an enormous amount of harm to patients. We backwoods physicians are accused of hanging on to patients that should be sent to the city specialist, and perhaps that is true to some extent, but you can not blame us for wanting to retain a patient who if he

is sent to the city specialist will get a written report and specific instructions as to treatment, even to drugs and how to take them, a report that should go to the family physician or be put in the hands of any home physician selected by the patient. It may be true that the patient is paying for the opinion, but he is not paying for detailed instructions concerning drug treatment which he in no sense can carry out intelligently. Such a specialist is "playing to the galleries."

Sincerely yours,

JOHN ASA GIBBONS, M.D.

BOOK REVIEWS

Books received since July 1, 1930:

TROPICAL MEDICINE IN THE UNITED STATES. By Alfred C. Reed, M.D., professor of tropical medicine, the Pacific Institute of Tropical Medicine Within the George Williams Hooper Foundation for Medical Research of the University of California. Sixty illustrations, 410 pages. Cloth. Price \$6.00. J. B. Lippincott Company, Philadelphia and London, 1930.

CLINICAL NUTRITION AND FEEDING IN INFANCY AND CHILDHOOD. By I. Newton Kugelmass, M.D., Ph.D., Sc.D., associate attending pediatrician, Fifth Avenue Hospital, etc. 345 pages, with thirty-seven illustrations. Cloth. Price \$6.00. J. B. Lippincott Company, Philadelphia and London, 1930.

BURNS. Types, Pathology and Management. By Geo. T. Pack, B.S., M.D., Fellow of the Memorial Hospital, New York City, etc., and A. Hobson Davis, B.S., M.D., instructor in pathology, University of Alabama. 364 pages. Cloth. Price \$6.00. J. B. Lippincott Company, Philadelphia and London, 1930.

PHYSICAL DIAGNOSIS. By Richard C. Cabot, M.D., professor of clinical medicine in Harvard University. Tenth edition, revised and enlarged. 529 pages with six plates and 279 figures in the text. Cloth. Price \$5.00. William Wood & Company, New York, 1930.

COLLECTED PAPERS OF THE MAYO CLINIC AND THE MAYO FOUNDATION. Edited by Mrs. M. H. Mellish, Richard M. Hewitt, B.A., M.A., M.D., and Mildred A. Felker, B.S. Volume XXI, 1929, published in May, 1930. 1,197 pages, illustrated. Cloth. Price \$13.00. W. B. Saunders Company, Philadelphia and London, 1930.

SURGICAL DIAGNOSIS. Volume III and Separate Index Volume, completing the new work by forty-two American authors. Edited by Evarts A. Graham, M.D., professor of surgery, Washington University Medical School. Three volumes, totaling 2,750 pages, containing 1,250 illustrations. Cloth. Thirty-five dollars a set. W. B. Saunders Company, Philadelphia and London, 1930.

MANUAL OF DISEASES OF THE EYE. For students and general practitioners. By Charles H. May, M.D., director and visiting surgeon, eye service, Bellevue Hospital, etc. Thirteenth edition, revised. 461 pages, with 374 original illustrations, including twenty-three plates, with seventy-three colored figures. Cloth. William Wood & Company, New York, 1930.

NEW AND NONOFFICIAL REMEDIES, 1930. Cloth. Price \$1.50. 481 pages. American Medical Association, Chicago, 1930.

ANNUAL REPRINT OF THE REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION FOR 1929. With comments that have appeared in THE JOURNAL. Cloth. Price \$1. Eighty-one pages. American Medical Association, Chicago, 1930.

Book Reviews:

NEW AND NONOFFICIAL REMEDIES, 1930. Cloth. Price, \$1.50. Pp. 481; xlviii. Chicago: American Medical Association.

The present edition contains all of the features that have in the past made New and Nonofficial Remedies such a reliable and efficient guide to the physician who wishes to inform himself on the newer medicinal preparations: logical classification of preparations, with

authoritative articles on each class; complete and carefully written descriptions of preparations; elaborate indexes; and a useful cumulative list of references to the literature on articles not accepted by the Council. Among the more important revisions that appear in this edition are those of the general articles, Barbitol and Barbitol Compounds, Digestive Enzymes, Cod Liver Oil and Cod Liver Oil Preparations, Ovary, Pituitary Gland, Radium and Radium Salts, and Serums and Vaccines. Among the new preparations descriptions of which appear for the first time in this edition are: Bismarsen, which is sulpharsphenamine bismuth; Dial-Ciba, which is diacetyl-barbituric acid; Calcium Gluconate-Sandoz, a more palatable and less irritating preparation of calcium; Atoquinol-Ciba, a cinchophen derivative; Pitocin and Pitressin, solutions, respectively, of the oxytocic and pressor principles of the pituitary gland; Viosterol (the Council name for irradiated ergosterol) in the forms of Viosterol in Oil 100 D, which is irradiated ergosterol dissolved in vegetable oil, and Cod Liver Oil with Viosterol 5 D, which is cod liver oil with its vitamin D potency enhanced by addition of viosterol. While these new preparations (with the possible exception of Viosterol) do not constitute major additions to the physician's armamentarium, each one gives promise of relative usefulness, and the physician who desires to keep abreast with the progress of therapeutics will familiarize himself with them as well as with the many other new preparations described in this valuable book.

ANNUAL REPRINT OF THE REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION FOR 1929. With Comments that have appeared in THE JOURNAL. Cloth. Price \$1. Pp. 81. Chicago: American Medical Association, 1930.

This is the volume in which the Council annually collects the reports on articles found unacceptable during the year. This edition contains also several interesting preliminary reports on preparations which show promise but for which the evidence is not yet sufficient to justify acceptance by the Council. Reports are given on the following products rejected by the Council: Anayodin, claimed to be iodoxyquinolinol sulphonic acid (chiniofon) but marketed under a noninforming name without adequate statement of composition and with unwarranted therapeutic claims; Antiustio, an unscientific mixture marketed under a nondescriptive name with unwarranted therapeutic claims; Kerasol and Keraphen, unoriginal products, marketed under noninforming names; Sodiphene, an unoriginal alkaline phenol preparation marketed under a proprietary name with unwarranted therapeutic claims; Borocaine, procaine borate under a proprietary name; Quicamphol (Transpulmin), a quinine preparation for intramuscular injection in the treatment of lobar pneumonia; Toxogon, a preparation of inadequately declared composition marketed under a therapeutically suggestive name; Intramuscular Iron Arsenic Comp. (No. 201) and (Intravenous) Iron Cacod. and Glycerophosphate (No. 202), two irrational and unscientific mixtures exploited with emphasis on the numbers. Other rejected products are: Otoferrin, Tamerici Salts, Elixir Kacyan-McNeil, and Tablets Kacyan-McNeil. An authoritative article on serum disease and serum accidents by MacKenzie and Hanger is of considerable interest and timely importance.

TRUTH ABOUT MEDICINES

FOODS

The following products have been accepted by the Committee on Foods of the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in Accepted Foods:

NOURON (Nouron Products Corporation, New York).—The ingredients used in the manufacture are soy beans, whole wheat flour and egg yolk. It is claimed to be a

nutritious, digestible and palatable food prepared especially for assisting in the gradual change from a liquid to a solid diet, as for weaning babies and for convalescents.

MERRELL-SOULE WHOLE LACTIC ACID MILK POWDER (Merrell-Soule Co., Inc., New York).—It is made from fresh whole milk. It contains fat, 28 percent; protein, 26.5 percent; lactose, 32.5 percent; mineral matter, 6 percent; total acidity, 5 percent; free lactic acid, 4.25 percent; moisture, 2.25 percent. It is prepared from pure whole milk inoculated with a culture of *Streptococcus lactis*. This product is claimed to have the value of freshly prepared lactic acid milk.

JELL-O (The Jell-O Co., Inc., LeRoy, New York, General Food Corporation, Successor).—A mixture of pure gelatin, cane sugar, pure fruit flavor, fruit acid from grapes and vegetable color.

CARNATION MILK (Carnation Milk Products Company).—Cow's milk reduced to consistency of cream by evaporating in vacuum and then sterilizing. It contains the vitamins that any cooked milk is depended on to supply.

NEW OATA (Ralston Purina Co., St. Louis).—It contains rolled oats and precooked rolled wheat. It is claimed to provide iron, phosphorus and the constituents of these grains in a form permitting rapid cooking.

PURINA WHOLE WHEAT FLOUR (Ralston Purina Co., St. Louis).—It is composed of whole wheat. It is claimed that the product is rich in iron, phosphorus and other minerals.

CHECKR-CORN FLAKES (Ralston Purina Co., St. Louis).—It is claimed to provide flavor and variety appealing to the appetite.

RALSTON WHEAT FLAKES (Ralston Purina Co., St. Louis).—It is composed of whole wheat, claimed to provide nourishing food in appetizing form.

RALSTON (The Whole Wheat Cereal) (Ralston Purina Co., St. Louis).—It is choice hard winter wheat, containing the wheat embryo, with its vitamins. It is claimed that the whole wheat berry supplies the elements for healthy growth.—(*Jour. A. M. A.*, June 14, 1930, p. 1919).

PROPAGANDA FOR REFORM

TILTON CANCER CURE.—Lester Tilton, originally from Clinton, Iowa, more recently of Chicago, has for many years been exploiting an alleged cure for cancer. For some years Tilton had a quack "institute" in Clinton, Iowa, treating, at different times, cancer, tuberculosis and syphilis. Tilton has no medical nor pharmaceutical training. Recently a committee from the faculty of Northwestern University Medical School investigated the Tilton treatment. The committee made an extensive and detailed account of cases treated by the Tilton method. The committee, in summing up its report, stated: "To date, of the twelve cases treated, eight have died, one is moribund, two have cancer clinically and microscopically, and one is free from demonstrable disease (as she was when the Tilton treatment was begun). The essential part of the Tilton remedy is an escharotic. Various specimens of this, analyzed in the A. M. A. Chemical Laboratory, have disclosed the presence of quantities of zinc chloride. Recently Tilton has transferred his activities to Detroit. He thus comes in direct competition with Detroit's own "cancer curer," William F. Koch.—(*Jour. A. M. A.*, June 7, 1930, p. 1858.)

EKA SALT AND THE SALT FREE DIET.—Eka salt (claimed to contain sodium malate as its essential constituent) is offered as a means of giving the same flavor as common table salt without making it necessary for the body to deal with the ten or fifteen grams of sodium chloride that ordinarily would be taken. Since no one knows whether the sodium or the chloride is responsible for any of the untoward effects attributed to sodium chloride, it would not be proper to include Eka salt in a diet that is intended to be strictly salt free.—(*Jour. A. M. A.*, June 7, 1930, p. 1859.)

METHODS OF FAVORING BILE DRAINAGE.—Proprietary mixtures containing phenolphthalein, acid sodium oleate, salicylic acid and menthol had much vogue some years ago. This was an attempt to combine the experimentally demonstrated stimulants to bile secretion (salicylic acid and menthol) with the bile-expelling effect of fatty acid (quantity probably entirely inadequate) and the laxative action of phenolphthalein. The Karlsbad treatment, consisting of the ingestion of hot alkaline laxative mineral waters, is another way of aiming at the same result, which has centuries of favorable experience in its favor. Either the natural or the artificial Karlsbad salt (N.F.) may be taken by the teaspoonful to a tumblerful of hot water half an hour before the larger meals.—(*Jour. A. M. A.*, June 7, 1930, p. 1861.)

THE SALE OF SUNSHINE LAMPS TO THE PUBLIC.—The Council on Physical Therapy has taken the stand that a sunshine lamp sold directly to the public should be so constructed that the radiant energy emitted shall not differ essentially from sunlight. Furthermore, the advertising and descriptive matter pertaining to such lamps should contain no curative claims nor mention of specific diseases. The Council believes that the advertising should be more conservative: it is not convinced that human beings in health require the great amount of ultraviolet energy one is lead to believe is the case from the advertising pertaining to some of the so-called sun-lamps sold to the public.—(*Jour. A. M. A.*, June 14, 1930, p. 1918.)

A STATEMENT TO MANUFACTURERS OF PHYSICAL THERAPY EQUIPMENT.—It has come to the attention of the Council on Physical Therapy that certain manufacturers make unscientific and unwarranted claims in advertisements that appear in publications other than those of the American Medical Association while advertising the same equipment conservatively in publications of the Association. The Council calls the attention of manufacturers to the fact that all advertising must conform to the requirements of the Council if the apparatus is to remain acceptable to the Council.—(*Jour. A. M. A.*, June 14, 1930, p. 1918.)

DIGESTIVE ENZYMES FOR ORAL ADMINISTRATION OMITTED FROM N. N. R.—The Council on Pharmacy and Chemistry reports that in consideration of the replies to a questionnaire sent out in 1925 it was decided at that time to continue the acceptance of gastric ferment preparations, including those intended for internal administration, to await confirmatory evidence in favor of their use. No acceptable evidence showing the value of gastric enzymes when administered orally having become available, the Council has omitted all digestive enzyme preparations save those recommended for use outside the body for the digestion of food previous to administration and locally for the softening of dead tissues or the solution of false membranes. The following are the products which have been omitted: Elixir of Enzymes (Armour & Co.); Essence of Pepsine-Fairchild, Gastron, Holadin and Diazyme Glycerole (Fairchild Bros. & Foster); and Panase (Frederick Stearns & Co.).—(*Jour. A. M. A.*, June 14, 1930, p. 1919.)

ACCEPTED AND NONACCEPTED VIOSTEROL PREPARATIONS.—When the question of accepting preparations of irradiated ergosterol arose, the Council on Pharmacy and Chemistry adopted a common name, viosterol, for this product. This name is not protected by trademark or copyright. It appears to have been adopted generally and is used by all manufacturers whose products have been accepted by the Council, with modifications to indicate composition and strength in vitamin D, as viosterol in oil 100 D and cod liver oil with viosterol 5 D. These products are all required to be physiologically standardized according to the method given in New and Non-official Remedies and may be relied on to have the composition and antirachitic strength claimed on the label. Therapeutic claims other than those permitted by the Council are not made for them. While it is desirable that the short, concise descriptive name viosterol be adopted generally to designate irradiated (activated)

ergosterol, there is a danger that it may be used in connection with some preparations in such a way as to give the impression that a product that has not been considered or accepted is one of those accepted for inclusion in New and Nonofficial Remedies. In order not to waste his time and his patient's money (or worse) by using a product of unknown strength or composition, the physician should make certain that it has been accepted by the Council on Pharmacy and Chemistry. This can be determined by a statement to that effect on the label of the product, by the occurrence on the label or package of the seal which the Council permits manufacturers of accepted products to use, or by direct inquiry to the American Medical Association.—(*Jour. A. M. A.*, June 14, 1930, p. 1923.)

FLAXOLYN.—"Flaxclyn" purports to be the "discovery" of one H. H. Luntz. For some time Flaxolyn was a mixture of powdered herbs, but the alleged formulas have varied with the years, and in no instance have quantities been given. Today, Flaxolyn comes in two forms—powder and liquid. The report of the National Better Business Bureau on the testimonials used in Flaxolyn advertising furnished evidence to warrant the total rejection of Harris H. Luntz's Flaxolyn advertising.—(*Jour. A. M. A.*, June 14, 1930, p. 1936.)

SUPER D BRAND COD LIVER OIL.—The Upjohn Company markets a product "Super D Brand Cod Liver Oil." The advertising that is issued for this preparation reads as if the product were cod liver oil fortified by the addition of irradiated ergosterol. The Upjohn Company has not requested consideration of the preparation by the Council on Pharmacy and Chemistry and so far the Council has not reported on it. The Council has announced the acceptance for New and Nonofficial Remedies of the following brands of cod liver oil with viosterol 5 D: Abbott's Cod Liver Oil with Viosterol 5 D (Abbott Laboratories); Parke, Davis & Co.'s Cod Liver Oil with Viosterol 5 D (Parke, Davis & Co.); Squibb's Cod Liver Oil with Viosterol 5 D (E. R. Squibb & Sons); Squibb's Cod Liver Oil with Viosterol 5 D, Mint Flavored (E. R. Squibb & Sons).—(*Jour. A. M. A.*, June 14, 1930, p. 1939.)

NO INTESTINAL ANTISEPTIC.—There is really no such thing as an intestinal antiseptic, if that term is defined as equivalent to disinfectant, there being no known influence capable of killing the micro-organisms in the living intestine. If the term is defined to include inhibition of the growth and diminution in the number of intestinal microbes, then diet (milk diet in most adults) constitutes perhaps the most important influence of that kind. Mild mercurous chloride might qualify as an efficient drug with a tendency in this direction. Phenolsulphonates (sulphocarbolates) are worthless.—(*Jour. A. M. A.*, June 14, 1930, p. 1939.)

POSSIBLE DEATH FROM DRINKING ETHYLENE GLYCOL ("PRESTONE").—A death is ascribed to drinking Prestone. Prestone is ethylene glycol. It is an excellent anti-freeze agent for automobile radiators but a questionable beverage. Ethylene glycol has been introduced as a non-toxic substitute for benzene in lacquers and paints. There is no record of untoward effects from its proper use. Taken as a beverage, intoxication and death are reasonable expectations.—(*Jour. A. M. A.*, June 14, 1930, p. 1940.)

DESICCATED OVARIAN PREPARATIONS FOR ORAL ADMINISTRATION OMITTED FROM N. N. R.—The Council on Pharmacy and Chemistry reports that, believing that the available evidence fails to prove the therapeutic value of desiccated ovarian preparations composed of all or a part of the ovary for administration by mouth, it decided to omit all such preparations with the close of 1929 unless new evidence should meanwhile develop making other action justifiable. No acceptable evidence for the value of desiccated ovarian preparations for oral administration having become available, the Council confirmed its decision and omitted all desiccated ovary preparations for oral administration from New and Nonofficial Remedies, 1930.—(*Jour. A. M. A.*, June 21, 1930, p. 1997.)

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A M E R I C A N O P T I C A L C O M P A N Y

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TITUS H. HARRIS AND ABE HAUSER, Galveston, Texas (*Journal A. M. A.*, July 12, 1930), report five cases and conclude that bromide intoxication is a frequent condition and must be considered in the diagnosis of any case showing an acute organic type of reaction. The diagnosis is simple with the Wuth comparator, which is accurate enough for clinical purposes and does not require technical skill. The symptoms, while essentially those of an acute organic reaction, will vary with the personality make-up, and other toxic factors. After the clinical opinion has been confirmed the treatment is relatively simple, consisting of forcing fluids and administering large amounts of sodium chloride. If the patient is unable to take fluid by mouth, physiologic solution of sodium chloride may be given by rectal drip and hypodermoclysis. Usually after twenty-four hours of this medication the patient will be aroused enough to take liquids by mouth and physiologic solution of sodium chloride may be given in amounts of 8 ounces (235 cc.) every two hours. With this program he will get from 200 to 250 grains (13 to 16.5 Gm.) of salt in twenty-four hours. The patient may then become restless and more difficult to control, and he frequently expresses ideas of persecution and has hallucinations freely. These symptoms gradually subside as the bromide is eliminated and recovery occurs in from ten days to three weeks, depending on the severity of the bromide retention.

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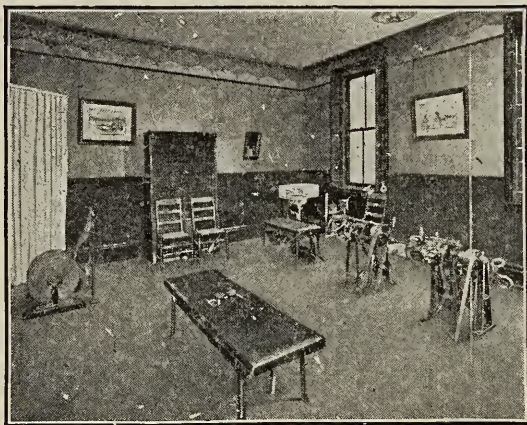
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ORIGINAL ARTICLES

BILATERAL RENAL LITHIASIS*

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INDIANAPOLIS

The problems involved in bilateral renal lithiasis have been discussed ably by Geraghty¹ in 1921, and Chetwood² in 1928, and there is little to add to the *dicta* laid down by them as to the choice of procedures in a variety of conditions; nevertheless the present-day trend toward greater conservatism in renal surgery finds a field of application in these difficult cases.

Statistics from various sources give the incidence of bilateral renal calculi as from ten or twenty percent of the cases of renal lithiasis observed clinically. Legueu³ found twenty-four cases of bilateral stone out of seventy-six cases of renal lithiasis at autopsy. These figures indicate that the disease tends to become bilateral if neglected or inefficiently treated. Most cases of bilateral renal calculi are infected. Occasionally where the calculi are small the urine is sterile. These stones often pass spontaneously. Prompt removal of such stones is necessary to save the kidneys.

In cases of bilateral renal calculi of the branched or staghorn or giant type there is often no pain, the patients suffering from septic absorption. The removal of such stones often requires an extensive nephrotomy incision attended by hemorrhage and shock, and followed by reduced function from the destruction of renal tissue involved in the scar of operation.

In deciding on operation one may be influenced by several factors. One will consider whether the removal of the calculi involves greater destruction of kidney tissue than will result from the presence of the calculi; whether probable improvement following removal of the stones justifies the risk or whether it is desirable to undertake removal of all of the stones. A stone free in the pelvis, causing intermittent obstruction or a calculus obstructing the ureter may require first consideration. The development of acute pyonephrosis or ureteral obstruction may demand immediate action.

It is accepted generally that the kidney with the better function should be operated first, the better kidney being attacked first to conserve to a maximum its function before operating upon its fellow. This opinion is best applied in the case where one kidney is almost completely destroyed and the other has fair or good function. There are many exceptions to this rule. The position of the stones and the degree of obstruction must be given consideration along with that of the function.

Multiple calculi in different parts of the urinary tract may be present in addition to bilateral renal stones, *i. e.*, in the ureters, the bladder and the urethra. Unless there are contra-indications those stones in the lowermost position in the urinary tract should be removed first, as the lower the stone the greater the tendency towards serious obstruction. No rule can be laid down as each case must be handled according to its individual peculiarities. Likewise the time of operation calls for the exercise of good judgment. Postponement in one case may give an opportunity for preliminary treatment to bring about improvement whereas delay may result in a hopeless state of a kidney that might have been restored by an early operation. It is important not to undertake too much at one operation.

Many of these patients suffer from the presence of incurable infection of the urinary tract and the most one can hope for is to minimize the infection and relieve pain. Although many of them are incurable they may derive great benefit from a well-planned and carefully executed program of operation and gain several years of comparative comfort.

The following series of cases directs attention to some of the problems involved in bilateral renal lithiasis:

Case I. Giant calculus of the right kidney and calculus of the lower left ureter complicated by pyonephrosis above, and prostatic retention. (Fig. 1.)

Operation, prostatectomy, left ureterolithotomy. Result, improved.

Mr. W. M., aged sixty-two, was first seen August 2, 1921. For ten years he had night frequency, and more recently pain in the region of the kidneys. There was residual urine and

*Read before the North Central Branch of the American Urological Association, Rochester, Minnesota, November 22, 1929.

cystoscopy disclosed a lateral lobe hypertrophy of the prostate. X-ray showed a large stone occupying the entire right kidney pelvis, and a shadow two centimeters long and one centimeter wide opposite the lower third of the sacrum on the left side. The left ureter was obstructed at this point. The total phthalein output was low. Complete retention followed cystoscopy and catheterization was difficult. Vesical drainage became imperative. The hypertrophied prostate was removed by suprapubic two-stage operation.

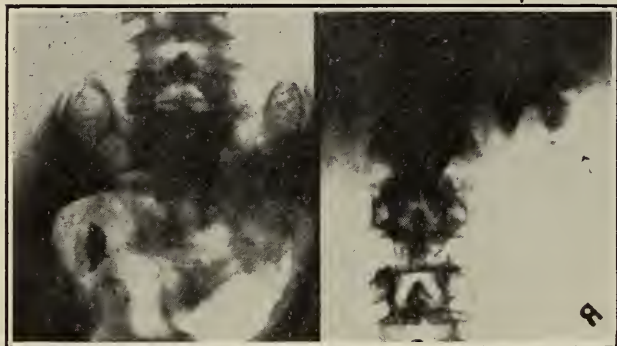


FIG. 1—Case I.

Eighteen months later the patient returned because of recurrent attacks of left renal pain and a gradual decline in health. The calculus in the left ureter was removed by ureterolithotomy under local anesthesia. Thick pus drained from the tube in the ureteral incision for a time, but soon cleared and the urine was of remarkably good quality.

This patient had an inoperable calculus disease of the right kidney and marked impairment of the left, from obstruction of the ureter, yet was able to go through the operation of prostatectomy from which he emerged much improved. Subsequent blocking of the left ureter required operative relief in the removal of the ureteral calculus.

Case II. Impacted calculus of the lower left ureter with hydronephrosis above and calculus disease of the opposite kidney and migrating calculus of the right ureter.

Operation: Left, ureterolithotomy; right, nephrolithotomy. Result, cure.

Mr. D. R., aged fifty-one, was first seen January 12, 1923, complaining of abdominal pain; pain in the left kidney region. A radiogram showed several calculi in the right kidney and one in the mid-section of the left ureter. A radiogram taken August 4th showed the calculus in the left lower ureter, multiple shadows in the right kidney region and a small shadow in the lower right ureter. This had not appeared in former films. On August 11th the stone was removed from the lower left ureter by ureterolithotomy. Later a left pyelogram was obtained which showed a greatly dilated kidney pelvis. The phthalein output from the left kidney was nine percent for two hours while from the right it was fifty-five percent for the two hours. By ureteral manipulations the stone in the lower right ureter was dis-

lodged and pushed upward into the kidney pelvis. The catheter was anchored to prevent the escape of the stone and by right nephrolithotomy three stones were removed. On October 17th a radiogram of the right kidney region showed a shadow, evidently the same as had been found formerly in the lower right ureteral region, located in the upper pole area of the right kidney. On October 24th the drainage catheter was removed from the right kidney, the right ureteral meatus was incised and the lower ureter dilated for three or four centimeters with the Lewis dilator. A radiogram now showed the shadow opposite the third lumbar vertebra. Repeated radiograms showed changes in the shadow evidently due to rotation of the stone, and on October 30th the stone passed into the bladder and was removed.

The patient was entirely free from urinary disturbance and enjoyed fair health until the early part of 1929, when he developed severe headache. The systolic blood pressure was found to be 220. He died of cerebral hemorrhage in August, 1929.

The question of which side to operate first in bilateral calculi was decided in this case upon the assumption that the more involved left kidney might still be capable of regeneration and bring support in the problem of dealing with the right.

Case III. Calculus of the lower ureter with calculous pyonephrosis above, giant calculus of the opposite kidney, and stone in the bladder. (Fig. 2.)



FIG. 2—Case III.

Operation: Left, ureterolithotomy and litholopaxy. Result, improved.

Mr. J. J., aged thirty-nine, had for twenty years attacks of renal colic, and passed several small calculi. When first seen, November, 1923, his temperature was 100. There was a painful swelling in the left loin. The urine contained much pus and blood. The leucocyte count was 11,400. A radiogram showed a stone occupying the entire right kidney pelvis and calyces and multiple shadows in the left kidney pelvis. In the left ureter, at the level of the upper segment of the sacrum, was an elongated shadow two centimeters in width. There was also a shadow in the bladder region one and five-tenths centimeters in diameter.

On November 20, 1923, by extraperitoneal ureterolithotomy the stone was removed from the left ureter. A large amount of pus escaped through the ureteral incision. In a few days fairly clear urine drained and the wound was allowed to close. The vesical calculus was then removed by litholopaxy.

He still has multiple calculi of the left kidney and a giant calculus of the right. Some time ago he had an abscess of the left loin which opened spontaneously and several calculi were discharged. A recent x-ray shows a marked increase in the size of his calculi.

Case IV. Bilateral renal calculi and ureteral calculi, also bilateral.

Operation: Nephrotomy, ureterolithotomy. Result, unimproved.

Mr. X. G., aged thirty-two, was admitted to the hospital July 8, 1924, for urological examination on account of pain in the abdomen and right side accompanied by nausea and vomiting.

The urine was cloudy, PSP sixty-five percent, for two hours. Physical examination was negative except slight tenderness on deep pressure over right constovertebral angle. X-ray showed a calculus the size of a lima bean in the upper calyx area of the right kidney and a smaller calculus in the lower pole area of the left.

Advice to have the stones removed was not followed and patient was not seen again until January 15, 1926. The pain in the right kidney region was growing worse. X-ray showed the stone in the right kidney as observed eighteen months ago but increased in size, and the stone in the left kidney had passed to the lower third of the ureter. In February, 1926, he was operated elsewhere for removal of the right renal calculus.

On January 8, 1929, he reported that he had had an attack of urinary suppression in July, 1928, due to calculi in each ureter. An attempt had been made to remove the ureteral calculi by operation but failed. A letter from his physician says a recent x-ray now shows a recurrent stone in the right kidney, one in the lower right ureter and one in the left ureter.

Case V. Bilateral renal calculi of large size

causing no symptoms. (Fig. 3.)

Not operated. Condition unchanged.

Mr. C. T., aged fifty-three, teacher of physical education, was first seen in February, 1925. He had always enjoyed good health but was subject



FIG. 3—Case V.

to attacks of "lumbago." There was no complaint of frequent or painful urination. The urine was cloudy. Urinalysis was negative except for the presence of pus and blood cells. He maintained a normal weight. X-ray showed bilateral renal calculi, the stones filling both pelves and calices.

This man has been under observation at intervals of three or four months. He has continued at his work and has little disturbance. In fact he would not be conscious of trouble in his urinary system had he not been x-rayed for possible gall stones several years ago when the presence of bilateral kidney stones was detected.

Case VI. Bilateral calculi, the right located in the lower calyx and the left, consisting of five large calculi in a large pyonephrosis.

Operation: Left, nephrectomy; the right not operated. Result, improved.

Mr. J. G., aged forty-eight, was admitted to the hospital January 17, 1926, complaining of recurrent attacks of pain in the left loin and the passage of kidney stones.

For several years there was soreness and fullness of the left kidney region. This would be relieved by the passage of purulent urine. The condition has grown worse gradually and he has lost thirty pounds in weight.

On physical examination a large, irregular, lobulated mass was felt in the upper left abdomen.

The urine was very cloudy, with pus. PSP seventy-nine percent for two hours. NPN 26.4 mg. X-ray showed a stone the size of a large hazelnut in the lower poll area of the right kidney. The left kidney shadow was enormous, extending downward to the upper sacral level. In this area were shown five large calculi in the calices with calculus material filling the pelvis; also another large calculus evidently in a dilated ureter.

Operation: On February 1, 1925, through a left loin incision a large abscess of the left kidney was evacuated and the kidney removed. The patient left the hospital February 15th. He was advised to return as soon as he had recuperated for removal of the stone in his right kidney.

An x-ray taken October 11, 1926, showed no change in size of the stone in the right kidney. He felt well, had gained ten pounds in weight, had no disturbance of urination and the urine was fairly clear.

When last seen August 4, 1927, he complained of a dull ache in the right kidney. The urine was slightly cloudy, showed a trace of albumen and many pus and blood cells. X-ray showed an increase in size of the calculus in the lower poll and there was evidence of soft calcification throughout the pelvic area.

Case VII. Bilateral renal calculi of small size, the right removed by pyelolithotomy, the left passed spontaneously after renal lavage.

Operation, pyelolithotomy. Result, cure.

Mr. M. V. H., aged fifty-seven, had pain in back and attacks of renal colic for nine years. X-ray examination June 3, 1926, showed a calculus the size of the tip of finger in right lower calyx and two small calculi in the left kidney. The stone in the right kidney was removed by pyelolithotomy. Lavage of the kidneys was given periodically and the left calculi passed spontaneously into the bladder and were removed with the rongeur cystoscope.

X-ray April 28, 1927, was negative for calculi. There was no bladder disturbance and the urine showed a moderate number of pus cells.

Case VIII. Bilateral renal calculi of rapid increase in size.

Operation: Right, pyelolithotomy; left, pyelolithotomy. Result, cured.

Mr. W. S., aged thirty-two, was first seen January 5, 1926, complaining of pain in the right abdomen and hematuria.

The ureter catheter met an obstruction on the right side at the uretero-pelvic juncture which was passed and forty-five cubic centimeters residual urine was aspirated. No obstruction was encountered in the left ureter.

X-ray showed a stone in the right renal pelvis the size of a bean and in the left lower poll a small calcified area. The urogram of the right showed a large and irregular pelvis and blunted calices, the ureter dilated except at the uretero-pelvic juncture where it was narrowed. The left

pyelogram showed a slight dilatation of the pelvis and the calcification was partially obscured.

Diagnosis: Right hydronephrosis with structure of the upper end of the ureter, and bilateral renal calculi. Dilatations of the right ureter and lavage of both pelves were given March 19th, April 20th, May 17th, and June 15th, at which time a No. 12 bougie was passed to the kidney.

The patient was not seen again until September 17th. X-rays now showed stones in both pelves with prolongations into the lower calyx of each kidney. (Fig. 4.)

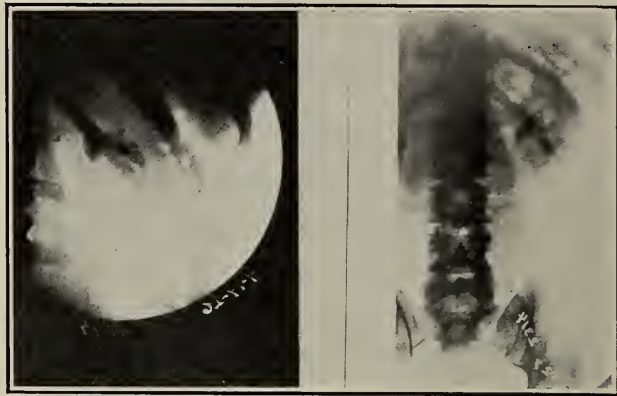


FIG. 4—Case VIII.

The patient was admitted to the hospital September 30, 1926, for operation. Phthalein output was sixty-one percent for two hours. The NPN was forty-five milligrams.

On October 5, 1926, the stone which filled the right pelvis and the lower calyx was removed by pyelotomy. The pelvic portion measured two and one-half centimeters and the branch in the lower calyx three centimeters. The patient left the hospital with his wound healed on the 20th day after operation, expecting to return in a few weeks for removal of the stone in the left kidney. Shortly after returning home he had pain in the right side and fever. The wound opened and discharged urine. There were repeated attacks of colic and he passed at intervals five small stones.

X-rays of the right kidney area showed two small stones, one in the kidney and the other in the ureter. The ureter was dilated at intervals of two weeks until size 14F bougie was reached, after which two stones were passed and the wound healed.

On February 3, 1927, x-rays showed no evidences of stone in the right kidney or ureter, but the stone in the left kidney now filled the pelvis and the two lower calices.

On March 23, 1927, a large, branched stone with prolongations into all calices was removed from the left kidney by pyelotomy. The stone was broken in removal and a small fragment lodged in the lower calyx was removed by incision through the parenchyma.

X-ray April 15, 1927, showed two small shadows in the upper calyx.

Periodical dilatations of the ureters were given at regular intervals and the pelvis lavaged. The two small stones in the left kidney passed spontaneously.

X-ray June 22, 1927, showed no evidences of calculi. When last observed July 8, 1930, the urines showed occasional pus cells in the right and none in the left.

In the period of a year we observed in this man a remarkably rapid formation of bilateral kidney stones, notwithstanding the patient was under close observation and regulation as to habits, diet, medication, etc.

It is in this type of cases, it seems to me, that conservatism in surgery of the kidney is of the utmost importance.

Case IX. Bilateral renal calculi of large size. (Fig. 5.)

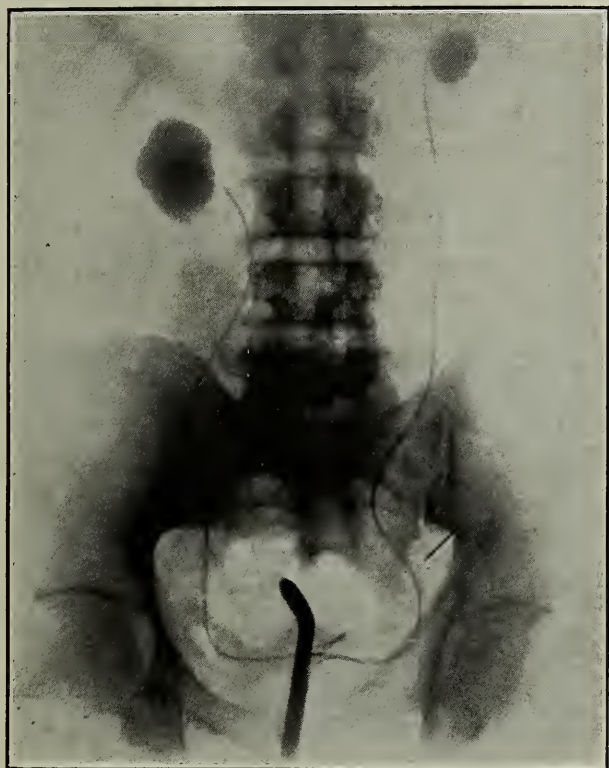


FIG. 5—Case IX.

Operation: Right, pyelolithotomy; left, not operated. Result, improved.

Mr. F. C. Z., aged fifty-seven, was admitted to hospital May 22, 1928, complaining of pain in abdomen and loins which he had endured for twenty-five years. The attacks became more frequent and severe. Three or four small calculi were passed. He had lost twenty-four pounds weight in a year. His temperature was 100, NPN 42.2 mg., PSP sixty-two percent for two hours, urine cloudy, albumen a trace, and pus cells many. Differential function test showed seventeen percent phthalein from the right kidney and eight percent from the left for ten minutes' collection. Both urines showed many pus cells.

X-ray showed a large, rounded calculus in the right kidney and a larger one and two smaller on the left.

He was operated on June 26, 1928, the stone was removed from the right kidney by pyelolithotomy. He was dismissed from the hospital on July 18th for recuperation.

When last seen, March 14, 1929, he had gained fourteen pounds in weight. He has been able to resume his occupation for several months. PSP test showed a total output of fifty-three percent phthalein for two hours. He was advised to return to the hospital for surgery of the left kidney, but as he suffers no pain and his health is improved he has not done so.

Case X. Bilateral calculi involving the left renal pelvis and the right ureter.

Stones passed after ureteral manipulations. Result, cured.

Mrs. M. R., aged twenty-eight, was admitted to the hospital October 5, 1928, with a temperature of ninety-nine, complaining of abdominal pain, headache, nausea, and vomiting, which developed after the birth of her babe three weeks prior to admission. Urination was frequent and the urine cloudy.

On physical examination there was a palpable fullness in the left loin, and tenderness in the right abdomen. The NPN was 34.5 mg. Cystoscopy was done and an obstruction found in the right ureter at eleven centimeters which was finally passed. One ounce of residual urine was obtained. X-ray showed a stone in the left kidney pelvis and one in the mid portion of the right ureter. The patient had occasional chills and fever, sometimes rising to 104. By October 10th, pain became more severe in the left side. On October 14th, an attempt to catheterize the left ureter failed, and x-ray showed a calculus in the lower left ureter. Catheter drainage of the right side was continued. Variable fever, nausea, and vomiting continued. On October 30th it was possible to catheterize both ureters and the catheters were anchored for drainage. Both urines showed many pus cells. The nausea abated and the temperature was lower. The catheters had to be replaced every seven to ten days. The stones remained in the lower portion of the ureters. The nausea and abdominal pain continued. By December 1st the pain had lessened, but the nausea continued and the patient showed definite evidences of her long illness. She had lost considerable weight. On December 18th the right ureteral stone had passed into the bladder and was removed with the rongeur cystoscope. On December 29th the left stone passed. She was dismissed on December 30th, feeling quite comfortable and with a normal temperature.

When last observed May 10, 1929, cystoscopy showed a normal bladder. The ureters were catheterized without difficulty and no residual urine

was obtained from either kidney. Both urines were negative for pus.

In observing the progress of this case the question of operation for the removal of the calculi was often debated. It seemed that the degree of infection was greater in the left kidney, yet one could not be sure, and the spontaneous passage of the calculi a few days apart saved us a decision in our desperation over the problem.

Case XI. Bilateral renal calculi of large size. (Fig. 6.)

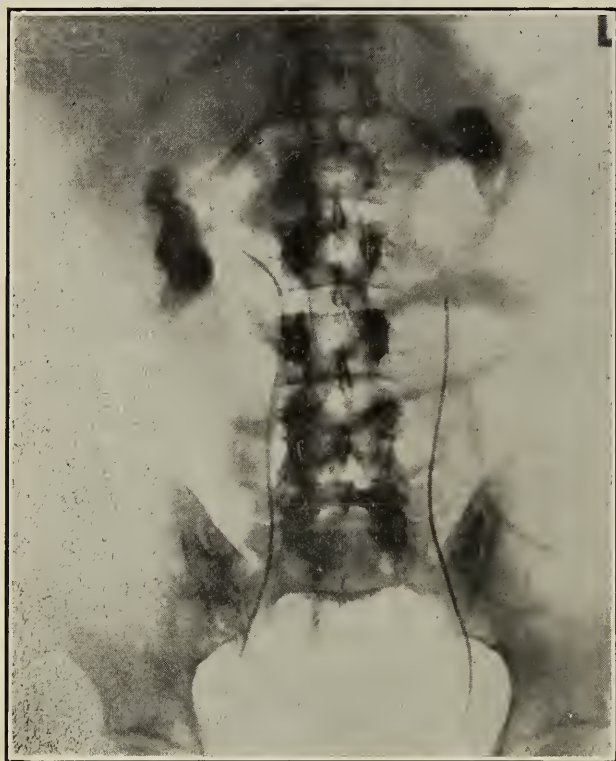


FIG. 6—Case XI.

Operation: Pyelolithotomy and nephrectomy. Result, cured.

Mr. L. S., aged thirty-five, was admitted to the hospital July 8, 1929, complaining of pain in the loins and frequency of urination, and loss of weight. The urine was very cloudy with pus. PSP test fifty-three percent for two hours. X-ray showed a large, irregular calculus in the right kidney, also in the left, but not as large as the right.

Diagnosis: Bilateral renal calculi.

Because of the size of these stones, the left being the smaller, and the right kidney showing the greater evidences of renal impairment, it was decided to remove the stone from the left kidney first. On August 3, 1929, a left pyelolithotomy was done. Upon opening the pelvis a number of small stones and one large stone were removed. A large stone filling the upper calyx was removed by incision through the cortex. Efforts to explore the ureter from the pelvis downwards failed to find the pelvic outlet. After freeing the ureter from below upwards it was found to be kinked

over an aberrant vessel to the lower pole. This vessel was ligated and divided and the ureter then freed from all adhesions. This permitted the passage of a uterine forceps down the ureter eight or ten centimeters. After thorough flushing of the kidney a rubber tube was inserted through the cortex and the incision in the pelvis closed. The kidney was then replaced and the wound closed about the drainage.

There was rapid improvement of the urine drained from the tube in the kidney and the tube was removed on the ninth day, following which the sinus soon closed. He left the hospital in five weeks feeling pretty well but still had some uneasiness in the right side and his urine continued to be creamy with pus.

He was readmitted to the hospital and operation upon the right kidney undertaken October 2, 1929. Through a right loin incision the kidney was exposed. It was found to be so badly diseased that the removal of the stone would be useless. The kidney, therefore, was removed. The specimen showed a very large, rounded kidney mass with a stone completely filling the pelvis.

On dismissal from the hospital the urine was amber in color, slightly cloudy, specific gravity 1.018, no albumen, no sugar, pus cells occasional, blood cells none.

Case XII. Bilateral calculi involving the left kidney and the right ureter. (Fig. 7.)



FIG. 7—Case XII.

Operation: Uretero-lithotomy; the left not operated. Result, improved.

Dr. F. B., aged forty-two, was admitted September 14, 1929, complaining of nausea and vomiting

(two weeks' duration) and anuria. No urine had been voided for fifty-two hours. None was obtained by catheter. The patient was given 1,000 cc. normal salt solution morning and evening by hypodermoclysis and heat applied to abdomen. The following day 975 cc. of urine was obtained and the next day 6,000 cc. From that time on the daily excretion of urine was from 1,500 to 2,000 cc. daily.

The blood NPN on admission was 60 mg. On September 16th 76.8 mg., September 21st 39.5 mg., October 4th 26.9 mg., October 21st 31.6 mg. The urine was cloudy, and showed a heavy trace of albumen and many pus cells. September 21, 1929, the PSP showed a total output of fifty-five percent for two hours.

X-ray showed the left kidney pelvis and calices filled with a branched calculus and in the right ureter opposite the fifth transverse process a large ureteral stone. Operation was needed urgently but was delayed for preparatory treatment. Under forced fluids and urinary antiseptics the temperature became normal and the nausea subsided.

On October 21st, the right ureteral stone, which was three centimeters long by one centimeter across, was removed by uretero-lithotomy through a right abdominal incision, and extra-peritoneal exposure of the ureter. There was definite narrowing of the ureter at the point of lodgment of the stone, and the incision in the ureter was closed by a transverse suture line.

The urine drained freely from the wound and none was voided following operation for two or three days. As the wound drainage decreased more urine was voided until none was drained through the incision when the volume voided had reached 1,800 cc. This gave the impression that the left kidney was functionless, but on November 8th the ureters were catheterized for the double purpose of dilating the right ureter, if it should be narrowed at the point of operation, and to determine whether there was function of the left kidney. Both ureters admitted catheters and the rate of flow from the left equaled that from the right. The right urine showed a few pus cells and the left showed many pus cells. There was a phthalein output of ten percent for ten minutes from the right and a trace from the left. It is evident that the suppression of secretion from the left following operation on the right was a reflex anuria.

On dismissal November 11, 1929, from the hospital he was instructed to return, after recuperation, for surgery of the left kidney.

He returned to the hospital December 2, 1929, and was operated December 5th. By a combined operation of pyelotomy and nephrotomy, three stones, two large and one small one, were removed from the left kidney. The kidney was drained by a rubber tube through the cortex and the pelvic incision closed. All drainage was removed by

December 14th and the loin wound had healed by December 22nd when he left the hospital.

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NEW THINGS IN BACTERIOLOGY

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We are engaged in the practice of medical principles that have grown from the theory of a few years or decades ago. Whatever one's specialty may be, bacteriology has made immense contributions to it. It has laid the foundation for modern surgery; it has paved the way for modern obstetrics; it has been fundamental to the present knowledge of transmissible disease, epidemiology and sanitation; it has showed the way to exact diagnosis and specific therapy; it has taught us how to immunize ourselves against disease. But there has not, if we may except for the moment the developments of theory that are the subject of this paper, been a really great discovery in bacteriology during the last three decades. To be sure we have added a few more diseases to the list of those which we understand, but the principle involved is the same as of old. The Dicks have discovered that the streptococcus is the cause of scarlet fever, and that is useful information. There is, however, no new principle involved, but merely the development of an old. Erysipelas antitoxin is essentially the same thing from the standpoint of theory as diphtheria antitoxin. Typhoid vaccine is a direct outgrowth of Pasteur's work with anthrax in the eighties. Aseptic surgery and relatively aseptic obstetrics are being refined more and more, but the underlying principle is the same as of old. We may well ask with some concern, "Is the horn of plenty exhausted?"

Why has bacteriology contributed so little really new theory and practice in recent years? It is probably because no other branch of medicine has been dogmatized so thoroughly. Immediately following the early days of the science there was an immense amount of careless work done in bacteriology, and in sheer self defense the leaders of the science were compelled to protect themselves against those careless workers who could not distinguish between a pure and a contaminated culture. The dictum that a culture of *bacillus typhosis* was always just so or else it wasn't *bacillus typhosis* was laid down, and it took a brave man to stand up and defy the gods. We have become so servile that many physicians think the work of a bacteriologist is something that can be done as well by a high school girl with a few weeks' training in some laboratory. We have been content to accept a swab from the surgeon or the intern with a "Yes, Doctor," and have gone to

the seclusion of the laboratory to report in two or three days that the organism was a streptococcus. In the meantime the operation has been finished, the surgeon having done as he pleased about it anyway.

But the dame that gave birth to modern surgery and obstetrics, that numbers among her offspring the sciences of epidemiology, sanitation and immunology, labors again. There is confusion aplenty in her household, she groans in travail, the coming of the young one is awaited with anticipation, anxiety, misgiving and concern. There is some question about the acceptance of the youngster by the older offspring of the mother that has gone thirty years without issue. We haven't named the baby yet, and there is a possibility that he won't amount to much, but we are sure that he is on his way.

It is impossible in this brief space to do more than sketch the newer concepts of modern bacteriology. Please bear in mind that these principles are not established fully for the most part. We would not have you believe, however, that they are wholly imaginary. The basis for the statements made here are well established; the application of them and the fine points are to be worked out.

It was formerly taught as scientific gospel that bacteria of a given kind are constant from one generation to another. It was said that bacteria have only asexual reproduction, each germ dividing into two. Inasmuch as the two daughter cells were equal parts of the former cell they must of necessity be like that cell and exactly like each other. Now we know this is not entirely true. It has been shown many times that from a single bacterium there may arise a number of different strains of bacteria that are quite unlike. To be sure it may be said that the culture has been contaminated, but that is not convincing when it happens regularly in the cultures of the most expert of technicians. At present a great deal is being written in the current literature about the sexual reproduction of bacteria, and complicated life cycles are being worked out. It is even being ascertained that Mendel's law of inheritance possibly may apply to bacteria as well as to all other forms of life.

A great many bacterial species may be made to change the typical form by which they have been well known for decades to another form which is very different. The typical typhoid bacillus for example produces a smooth broth culture without a pellicle or much sediment. On agar it is a moist gray, translucent growth; individual colonies are round and smooth; under the microscope the bacilli are typical rods. This is now called a "*smooth*" or "*s*" culture. Under certain conditions unfavorable to maximum growth the culture may be made to assume entirely different characteristics. On broth it grows a pellicle and has a marked sediment; the culture is spontane-

ously clumped or agglutinated. On agar the growth is dryer, more irregular, more opaque as a rule, and rough, or sometimes mucoid. Under the microscope the organisms are nearly round, looking like cocci. And yet this is certainly the typhoid bacillus. It is known as a "*rough*" or "*r*" culture. The "*rough*" colony has several very important differences from a strictly practical standpoint. I shall enumerate some of them.

Smooth:

Virulent.

Resistant to phagocytosis.

Susceptible to bacteriophage.

Motile—in some species.

Easily changed to rough.

Rod shaped.

Spore-bearing in some species.

Has a capsule in some species.

Rough:

Non-virulent—at least relatively so.

Susceptible to phagocytosis.

Resistant to bacteriophage.

Non-motile.

Not changed back to smooth.

Coccoid.

Non-spore bearing as a rule.

Has no capsule.

Many species of bacteria are now known to have essentially this same relation. There are the well-known "*smooth*" cultures and then the much less-understood "*rough*" ones with very different characteristics. The forces that tend to cause a "*smooth*" culture to turn "*rough*" are numerous. Briefly stated they may be summed up as the various unfavorable environmental forces. Starvation of the bacteria by the use of poor culture media, the addition of small amounts of antiseptics to culture media, growth for a long time in the same medium, growth at a higher temperature than the normal, the drying up of the medium and a number of others may be mentioned. The two most powerful agents used to force the smooth culture into the rough phase are, however, bacteriophage and homologous immune serum. Further application of this principle, which by the way is now established fully, is withheld for a moment.

Whatever may be one's personal opinion as to the efficacy of its use as a therapeutic agent, and we shall not discuss the matter here, the discovery of the bacteriophage is now considered by practically all authorities to be the most stimulating event in the recent history of bacteriology. We were in need of just such a shaking up as it gave us. It seemed so bizarre, so different, even so implausible, that it captured the imagination immediately. Since the announcement of this discovery by d'Herelle, bacteriological research has become far more vital and hopeful. A new voice has arisen in Israel. There is no longer any doubt about the following phenomena, pertaining to this much disputed question: The bacteriophage is an active principle that will cause the rapid solution

in a culture tube of sensitive strains of the homologous bacteria; it will force the bacteria that are able to resist it into the "rough" phase of their life cycle; when given with the homologous, sensitive organism to an experimental animal it will increase enormously the activity of the phagocytes. Whether the bacteriophage may be of value in therapy is a point that we do not wish to discuss at this time; we merely intend to point out that as a laboratory phenomenon it is well established.

D'Herelle thinks that the bacteriophage is an ultramicroscopic parasite upon bacteria. Bordet, Bronfenbrenner and others think that it is an enzymatic action of some sort. A number of other authorities, of whom Hadley is the leader, think that bacteriophage is merely a filtrable form of the bacterial life cycle. Each view has strong evidence in its favor.

In this connection is it interesting to know that a considerable number of different species of bacteria are now believed to have filtrable forms, *i. e.*, forms that can pass through a fine porcelain filter or Berkefeld candle. We long have known that tuberculous exudates and discharges are capable of infecting a guinea pig even when there is not to be found a single recognizable germ after the most exhaustive search. We have known that the caseous material in a tubercle still contains the infectious principle even though it usually cannot be detected by staining. A considerable number of other organisms have been found also to have these forms that apparently will pass through a filter somewhat perhaps in the manner that the seeds of a plant may pass through the meshes of a sieve if the plant is ripe when the attempt to sieve it is made.

But there are practical applications of this apparently strictly theoretical information which has been thrown at you hastily. Let me remind you that the first two basic principles upon which these applications are made are now well established, and pretty well established in the case of the last two mentioned:

1. Microbic dissociation—presence of "smooth" and "rough" types.
2. The bacteriophage as a laboratory phenomenon.
3. The existence of filtrable forms of bacterial species.
4. The existence of sexual life cycle for bacteria.

In all probability these are but different manifestations of the same thing, a thing that has not as yet been named, but the appreciation of the existence of which is the outstanding new concept to which we referred in the beginning of this paper. In the light of this new concept, or theory if you like, let us see what we are trying to do when we are treating an infected wound. The cultures of the wound reveal the presence of virulent staphylococci let us say. The organisms are taken and put into favorable culture media and in due time are recognized as typical cultures of

staphylococci. What shall we do about them being present in the wound? Some surgeons are attempting to kill the germs *in situ*. This cannot be done without injuring the tissues more than the germ, and yet the use of antiseptics of various sorts is an empirical remedy which most of you would defend strenuously. We do not blame you. We too think they are of value if the antiseptic is not too strong, but we do not believe that all the germs can be killed *in situ*. We believe, rather, that the antiseptic forces the germs into the "rough" phase—at least we know that antiseptics will do this in culture tubes. The "rough" organism is not virulent, and is highly subject to phagocytosis. The wound becomes less sore because of the loss of virulence of the germ, and it tends to clean up because the phagocytes are far more active against the infection. The antiseptic aids in healing then, not because it kills the germs, but rather because it forces them into a relatively harmless phase.

But in the culture tube there are better ways of enforcing the change to the "rough" form. Bacteriophage or homologous immune serum will be far more effective. Bacteriophage in certain types of wounds gives results that are usually good and sometimes astonishing. We have seen about 400 such cases personally, and as many observers can attest have had apparently hopeless cases change entirely in a short space of time and be on the road to recovery. Immune serum has, of course, been used for various purposes. Staphylococcus immune serum makes an excellent dressing for staphylococcus lesions. The baking of an infected leg often will give a splendid result. Let me remind you that heating a culture to a temperature above the optimum and holding it there for hours or days will cause the culture to turn "rough," and then become relatively avirulent. Is this what happens in the baked infected leg?

The new method of treating chronic osteomyelitis by first cleaning the lesion thoroughly and then dressing it with vaseline gauze and a plaster cast seems absolutely irrational to one who was brought up on the principle of treating pus cases by free drainage, but seems clear as noon day now. The germs are shut up for weeks with their own metabolic products and as a result are soon in very unfavorable conditions. They are, according to this theory, forced into the "rough" stage and so lose their virulence. Bacteriophage develops spontaneously in many of these dressings just as it does in old cultures. If we keep these lesions clean the bacteria are constantly fed on new serum that comes in, and are relieved from contact with their metabolic products; as a result they flourish, they remain "smooth" and consequently virulent, and resistant to phagocytes. When they are compelled by their own metabolic products to turn "rough" they lose virulence and become sensitive to phagocytosis.

The rationale for the irrigation of a cavity with Dakin solution finds a ready explanation. The solution removes the putrescible material and the serum. As a result the germs have a very unfavorable environment because of lack of food and presence of antiseptic. In consequence they are forced into the "rough" stage.

During the past few years Besredka, a French scientist, has brought forward a new principle in treatment that gives considerable promise. He grows cultures of bacteria in broth until they will grow no longer. The reason for the death of the germs usually is not the exhaustion of the food material of the medium, but rather the accumulation of the metabolic products of the particular germ. This culture is then filtered and is applied locally to the lesion to be treated, imitating in this way rather closely the manner in which the antigen stimulates the tissues to immunity production in the common infections. The filtrate is highly unfavorable to the bacteria and forces them to dissociate into the "rough" stage.

We have experimented with this antiviral, as it is called by Besredka, and are convinced that there is something worth while in it, though the fine points are by no means all worked out. For example, a gonococcus antiviral has been prepared and used in a number of cases. The results have been disappointing in several instances but in others brilliant. We have used it in several cases of vulvovaginitis of long standing that have resisted all other means of treatment and have obtained excellent results in more than half the cases. It also has been used with good results in a few cases of Bartholin gland infection and in paraurthral abscesses. We have no intention of urging its use in all cases but suggest that it is worth a trial in those cases for which other remedies have been found of little value. Certainly the method does not deserve dismissal after one or two applications. There is something in it, we are convinced, but it is not fully worked out.

Besredka also has done some very interesting work with various bacterial vaccines given by mouth. He points out that the really susceptible tissue in typhoidal infection is the intestinal mucosa. The same tissue is the seat of immunological processes of first importance. When typhoid vaccine is given by needle it must traverse the system from skin to bowel but finally exerts its effect upon the latter. The question is asked, "Why not apply it directly to the bowel by the administration of the killed bacteria *per os*?" Oral vaccination against typhoid is being used extensively in Europe with excellent results. It is claimed by nearly all investigators that the method gives a higher immunity; much less or no reaction, and that the immunity is developed much more quickly than when the vaccine is given by needle. It might be asked why we should wish to experiment with typhoid vaccination when it is already highly effective. As a matter of fact,

however, typhoid vaccine is so toxic and causes such discomfort that it is used less than almost any other vaccine on the market. A means of avoiding its toxic effects would be a great aid in the effective use of the vaccine. The oral vaccine also can be used in the treatment of typhoid fever, and in the prevention and therapeutics of dysentery and cholera. Certainly it is a most logical procedure and is reported actually to be a great success.

The possibility of application of some of these new facts to the manufacture of bacterial vaccines is a most enchanting one. Vaccines are undoubtedly of great value for many purposes, but have been put to uses for which they are not adapted. Typhoid and paratyphoid vaccines are made under government regulations which require that such cultures be used as are certainly of the "smooth" phase. A vaccine made from "rough" cultures probably would be less toxic. Would it be antigenic and, therefore, of value in producing immunity? This point has as yet not been determined with certainty. Inasmuch as it is now believed that bacteria have a sexual reproduction, and that it is claimed by some that they confirm Mendel's laws of inheritance, would it be possible to breed strains of bacteria of low toxicity and high antigenic powers? Seems rather bizarre we admit, but stranger things than that have been done by plant and animal breeders. Such a strain of bacteria apparently would be of advantage for the making of a vaccine.

Other interesting side developments in the field of active immunization are to be seen in the efforts to make various vaccines and immunizing agents less toxic. The substitution of toxoid for toxin-antitoxin in diphtheria immunization is a case in point. The toxoid is much used in Europe and Canada, and is said to give less reaction, a higher and quicker immunity. Furthermore, it is much more convenient to handle, not at all likely to lose its strength and is considerably cheaper. Toxoid is made by adding a small amount of formalin to diphtheria toxin and holding in the incubator for thirty days. The toxin loses its toxicity but retains its antigenic power. The use of sodium ricinoleate for the detoxification of vaccines is also well known, particularly as it is used in the preparation of Gabritchewski's vaccine for active immunization against scarlet fever. Attempts are being made to detoxify other vaccines, particularly typhoid.

In spite of the fact that it has become scientifically fashionable to question the value of vaccines, let us remind you that the basic theory of vaccines is air tight. There is no way by which we may gain specific immunity to germs except by some sort of actual experience with these germs or their products. We sometimes are immunized by having a disease, but that is dangerous and uncomfortable; we may be immunized by accidental contact with sub-infectious doses of bac-

teria, but that is uncertain; we may be immunized by the use of sera, but that is transient; finally we may use the modified or killed germs as a means of stimulating antibodies—this is vaccination and is safe. Can it be made more effective? There are a great many unsolved problems in the production and use of vaccines. Until they have been worked out we must not give up the theory which seems so impregnable. Modern bacteriology suggests that we try "rough" cultures, local application of vaccines, the use of the metabolic products instead of the bacteria themselves, detoxification, fractionated antigens, the lysed bacterial proteins, the bacteriophage filtrates; it suggests that consideration for the surface tension, the hydrogen ion content of the culture medium, the isoelectric point, and the electrophoretic potential be given. Dosage and the proper interval between doses has not been worked out, the indications and contraindications still are guessed at largely; really accurate means of checking up on vaccines have yet to be devised; an appreciation of the role of the reticulo-endothelial system so fundamental to immunity is barely awakened now. The doctor who presumes to dismiss the subject of vaccines as a fully exploited field is putting himself in a ridiculous position. We have but scratched the surface.

In this connection it is interesting that nearly all of the vaccines that have been so successful in the past have been put through some sort of an attenuation process short of actual killing. The viruses of smallpox and rabies commonly are not regarded as being related to bacteria. They both have been attenuated, however, by passing through an unfavorable animal. Anthrax and chicken cholera vaccine were attenuated by growing at a higher than optimal temperature by Pasteur. BCG vaccine that is being tried out in Europe as a prophylaxis against tuberculosis has been grown for years on unfavorable culture medium of low surface tension. Haffkines vaccines for cholera were grown for a long time at a high temperature, and his vaccine for plague was grown for six weeks without transplanting in the same culture medium. Activated vaccines are made by using living cultures and adding homologous immune sera which are highly unfavorable to the germ. Surely it is more than accidental that all of these means are the same as are used to cause bacteria to dissociate from the "smooth" to the "rough" form.

Surface tension phenomena commonly were considered by us when studying premedial physics to be interesting but not usable. We are now coming to regard surface tension as a most important matter in the understanding of bacteria and related subjects. Antiseptics with a high surface tension will not penetrate and, therefore, will not effect the result desired. Soap lowers surface tension and makes cleaning and disinfection far more effective. Cresol has a high tension, but a

soap solution of the same (lysol) is far more effective. Resorcinol was thought to be of comparatively little value until prepared in a medium with a surface tension of thirty-seven dynes (S. T. 37)—about half that of water. Alcohol is much used for the cleaning of the skin for the same reason.

The new BCG vaccine now widely used in Europe for the vaccination of children against tuberculosis is made from tubercle bacilli which have been grown for years on bile medium and have lost their virulence. The bile lowers the surface tension of the medium and causes a marked change in the formerly virulent organisms. Likewise the bile by its effect upon the surface tension detoxifies the toxins of diphtheria and tetanus when in the bowel very much in the way that sodium ricinoleate detoxifies the toxins of the streptococcus causing scarlet fever in Gabritchewski's vaccine. On the other hand the bile activates the toxin of the bacillus botulinus, making it more toxic when in the intestine. When we have given lactobacillus bulgaricus for certain intestinal troubles we have been unable to establish it in the bowel. On the other hand the very closely related lactobacillus acidophilus will establish itself in the bowel. The reason for this difference is found in the fact that the latter organism thrives in a medium of low surface tension while the former requires a higher. The streptococcus can attack the gall bladder while the related pneumococcus cannot for the reason that the low surface tension of the bile destroys the latter organism. The reason the colon-typhoid organisms thrive in the intestine is to be found in the fact that they do best in a medium of low surface tension. This is also the reason for the fact that they grow in a tube without the production of a pellicle, and that they produce the characteristic growth so well known.

The carrier problem is one that fits into this new understanding of bacteriology as a hand into a glove. It is well known that there are persons who are going about with germs in their throats that are morphologically diphtheria bacilli, but are found to be avirulent. These are now regarded by many as really being diphtheria bacteria in their "rough" phase. This accounts for the fact that occasionally when they get into the throats of susceptible individuals and find favorable conditions there they become virulent and hence infectious. It long has been known that as a rule the disease does not become highly virulent until it has passed through another person after it has come from the carrier. The same applies roughly for other diseases transmitted by carriers. It is not impossible that the carriers of such germs serve a valuable function in that they are inoculating the population with germs, of little or no virulence, but which are able to cause the development of immunity in susceptible individuals.

We often have wondered why certain patients

with typhoid and other infections should be doing nicely and then suffer a relapse. Dietary indiscretions and other irregularities have been accused, but really do not explain. It is now thought that possibly the reason lies in the change of a bacterial strain into a more virulent phase. The patient with typhoid is doing well; he is developing antibody against the strain of bacteria that is making him ill; that strain is forced into the "rough" stage, in part at least, and as a result the disease is waning; something happens which allows the germ strain to go back to "smooth" and we have what is essentially reinfection but coming from the patient himself.

In this newer theory we have a basis for the understanding of the fact that certain strains that are commonly harmless become infectious. D'Herelle believes that bacillus coli becomes infectious when it is able to develop strains that are resistant to the anti-coli bacteriophage which is practically always present in the intestinal tract. He thinks that the introduction of new strains of bacillus coli into the body of a person who does not have a strain of bacteriophage active against may result in trouble. Much the same may be said of a number of bacterial species which are characterized by having a large number of different strains. The pneumococcus illustrates this point. Type III pneumococcus is highly virulent and has a large capsule. Type IV is of little virulence and has practically no capsule. Types I and II are intermediate in both respects. How shall we explain this? Type III is to be regarded as the "smooth," type IV as the "rough" and types I and II are "intermediate."

Rather recently we have come to appreciate the fact that bacteria carry highly significant electrical charges. Means have been devised for measuring these charges and even controlling them. This electrical charge must be taken into consideration when filtering bacteria, inasmuch as the filter also has a charge and will let pass organisms with a like charge and will hold organisms with an opposite charge. Charged bacteria will not agglutinate until they are discharged in some way as by changing the PH of the medium to the isoelectric point or by adding immune serum which has the effect of discharging the bacteria. Charged organisms then tend to stay apart, discharged ones to stick together. It is possible by means of measuring the rate at which bacteria will move toward one or the other electrode to measure in an accurate manner the virulence of the culture. Organisms with a high charge are commonly virulent and those with a low charge are of low virulence. This general observation fits exactly many related observed facts in pathogenicity and immunology, and is a most helpful observation. Instead of using guinea pigs as test animals for the detection of virulence in diphtheria cultures it is now possible to use an electrical device which very promptly gives the an-

swer. By this electrical means it recently has been possible to purify bacteriophage, and to secure a concentration enormously greater than that commonly obtained. The possible application of these electrical phenomena to the treatment of infections by means of electro-therapeutics hardly need be mentioned. A most fascinating field has been opened by this new understanding of the electrical phenomena which have been so slightly mentioned.

Until recent years we had come to regard our knowledge of epidemics as being highly efficient. We now understand that there are a great many things that we do not understand at all, and others that we see but dimly. We have said that cholera is water borne, but could not explain why it nearly always travels up stream. Now we know that it is carried up stream by mankind rather than by water, and that the water below cholera infected cities contains a demonstrable bacteriophage which probably immunizes the populations below. We now begin to understand why the purification of a city water supply that has been contaminated heavily results in a fall in the typhoid death rate that is considerably more than we had expected. Possibly it is because the germ is filtered out but the bacteriophage goes on through and immunizes to some degree at least the population; for this reason too it is easier to purify a rather heavily polluted water in many cases than it is a relatively pure water.

Why should epidemics die out while there are still susceptible people in the community? This even happens in rat cages where no attempt is made to stop the disease. We can see here the suggestion of the reason. Why should epidemics come in cycles even in these rat cages which are exposed to infection purposely, continuously and uniformly? It is now known that bacteria vary at different times in their infectiousness. It is for example hard to isolate the visible forms of the typhoid bacillus from the first few cases of an epidemic. Later it is easy enough. In an army camp fifty-five percent of the men were proved by the Schick test to be susceptible to diphtheria, and one percent to be carriers of virulent germs. The men were freely intermingling and yet there was not a single clinical case. Why? Somewhere in this maze of new theory lies the answer.

We recently have been much perplexed to hear the eastern bacteriologists saying that poliomyelitis, encephalitis and other related diseases are due to a filtrable virus, while the Rosenow group insists that they are due to a pleomorphic streptococcus. Both groups are able to produce with their organism a serum that is claimed by many to have therapeutic value. Is not the possible explanation close at hand? Quite likely these two opposing groups have the same organism in different phases of its life cycle. Alice Evans takes eight different samples of encephalitis virus from entirely different sources and from each, by unique methods of culture, was able to grow the strep-

tooccus. Possibly this is a contamination, but streptococcus as a contaminant is very unusual. Incidentally, we are informed that the producers of hog cholera virus are sometimes bothered by the appearance of the streptococcus as a contaminant. Is it not more logical to believe that it is genetically related to the filtrable virus? There are indeed a number of diseases which are due to viruses that will pass through a filter that are now being found to be probably due to streptococcus—scarlet fever and measles are two recent examples. Virulent smallpox is practically always associated with streptococcus. Rheumatic fever is claimed by some to be due to a streptococcus and by others is thought to be a filtrable virus infection. The same is true of influenza, chorea, herpes, and others.

Our theories of virulence and of immunity are undergoing rapid change as a result of the onslaught of this new and far more virile bacteriology which seems capable of stirring the imagination as did the science in the golden days. Many of the new ideas are strange indeed, as for example the proposal actually scientifically to breed bacteria in such a way that their virulence will be lost and then to use these avirulent strains for the purpose of supplanting the more virulent strains in the population.

The purpose of this paper is not that of selling you the new theories. Many of the new ideas are doubtless incorrect, or at least impractical. We shall not mind at all if you have kept your tongue in your cheek during the reading of this article; we merely are warning you that bacteriology has changed more in the last five years than in the previous twenty-five. This change is possibly as great as the change in surgery before and after Lister. It has been said that the science is most alive that stimulates most the imagination. By that criterion, bacteriology is a mighty lively subject at the present time. We recommend that you regard it with curiosity, with anticipation and with respect.

EMERGENCY SURGICAL OPERATIONS*

(In the Presence of Hyperthyroidism; and Acute Hyperthyroidism as a Post-operative Complication)

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When confronted with an obvious surgical calamity, we focus our attention upon it and strive to correct the pathology quickly and accurately. Emergencies such as perforated peptic ulcer, acute appendicitis, strangulated hernia, bullet wounds of the abdomen, ruptured ectopic pregnancy, mangled extremities, *et cetera*, demand immediate surgical interference, usually under general anesthesia. However, we must remember that a patient

may have more than one pathological condition at the same time. This may be a coincidence or a direct result of the major problem, but it too demands immediate, accurate attention.

During the great war we learned from Cannon and many others some of the principles involved in surgical and traumatic shock. Prior to this, and before the text books and current literature began to point out the dangers of shock, it was not uncommon to see the following procedures: A man is brought into the receiving room with a mangled leg or a gun shot wound in the abdomen. He is taken to the surgical room and there given an anesthetic by an excellent anesthetist. His leg is amputated or his abdomen is explored by a skilled surgeon. But in spite of this immediate care the patient succumbs shortly afterward—in shock. We have all learned the fallacy of this sort of treatment and have taught it to our students and nurses.¹ The surgeon's attention was focused upon the mangled leg or perforated abdomen, but the patient as a whole was forgotten. However, conditions are different now. Practically every hospital has its "shock" rooms, and these patients are handled in an almost routine manner. The hemorrhage is stopped first, then a reaction from shock is brought about, before any surgical measures are instituted. If the condition is an intra-abdominal hemorrhage or perforation, blood transfusion, or an intravenous of acacia solution and glucose is given first and then the patient is operated upon. While the operation is in progress the patient is kept warm, saline solution is given intravenously and stimulation is given when indicated. Then he is watched and treated carefully post operatively. These facts need no elaboration.

Haden and Orr have shown us the need for saline solution intravenously in combating the toxemia in acute intestinal obstruction. No surgeon now attempts interference in these cases without it.

We are now confronted with another problem that seems to be increasingly common, which in some ways resembles shock and in some ways toxemia. I refer to patients with hyperthyroidism as a result of early or late exophthalmic goiter or so-called toxic adenoma. We see patients brought into our hospitals with emergency surgical conditions, given anti-shock treatment (or saline solution in intestinal obstruction), yet they either succumb during or within a short time after operation. Some get well after going through a very severe and dangerous "storm."

These patients may have active hyperthyroidism in the form of exophthalmic goiter or toxic adenoma and know of it. Having delayed treatment they become the victims of a sudden surgical emergency, or they may not know they are suffering from hyperthyroidism—having had only minor symptoms such as nervousness, or palpitation, or shortness of breath or any of the early symptoms of this disease. We may even go a

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step farther and agree with Warthin,² who believes that we are born with a "Graves' constitution," which harbors latent hyperthyroidism, inactive, but capable of being activated under proper stimulation. We know that the course of exophthalmic goiter is characterized by incomplete remissions and exacerbations. Remissions may occur spontaneously or may be hastened by iodine, rest, or both. These remissions as a rule are not permanent or complete. They may last for a period of several weeks or months. We also know that exacerbations occur in the natural course of the disease. But they may be hastened by fatigue, intense psychical stimulation, by an intercurrent acute infection or an accident or calamity or any unusual strain, mental or physical. Exacerbations of this sort manifest themselves by an overwhelming toxicity known as the crisis of hyperthyroidism. In these cases we are confronted with the problem of combating shock, toxemia (in intestinal obstruction or extensive burns) and acute thyrotoxicosis. Like shock acute thyrotoxicosis takes precedence over all other conditions, except hemorrhage, and must be met first. These patients stand anesthesia and surgical procedures badly and may die as a result thereof.

Symptoms of Acute Thyrotoxicosis: The history taken from a member of the family often will reveal important facts as to the behavior of the patient. Intense appetite, loss of weight, extreme nervousness manifested by constant motion or sudden outbursts of "temper", or any of the other groups of symptoms relevant to the disease may be elicited. The age of the patient, usually young adults; the sex, more often female; and the type patient (slender skeleton, bright eyed, alert facies, etc.—Warthin) may help. Early in the syndrome we have a rising pulse rate, marked excitability, lessened emotional control and over activation generally. The patient complains of nervousness and of being hot and he throws the covers off. If his condition is not diagnosed and he is operated upon, he develops the actual crisis and its group of symptoms which I shall discuss under post-operative hyperthyroidism.

How are we to separate symptoms? Patients in shock have a rapid pulse as do these patients, but it is not as bounding. In shock patients are apathetic, they are oblivious to their surroundings. They do not speak unless urged to do so and then they do not initiate any ideas; they only answer questions by a "yes" or "no." In thyrotoxicosis the patient is very talkative and wide-awake and excitable. In a general paper of this nature it is impossible to discuss individually each symptom in each condition. However, more will be said concerning the similarity of thyrotoxicosis, delayed shock, hemorrhage, peritonitis, and intestinal obstruction under post-operative hyperthyroidism. It should be said, however, that in cases where actual shock exists the symptoms of shock predominate. Measures must be instituted to

bring about a reaction. This soon occurs and then the thyrotoxic symptoms are seen easily. When we have concealed hemorrhage this cannot be done as the hemorrhage must be arrested first in order to control shock.

We have seen many cases that illustrate the problem. A man, N. B., thirty-six years of age, was admitted to my service in the City Hospital in December, 1929, with a diagnosis of acute surgical abdomen. He had vomited several times and had suffered from "stomach trouble" in the past. He was wide-awake and apprehensive, violent pain in the upper abdomen of six hours' duration was his chief complaint. This pain was not relieved by three-fourths grain of morphine (this is important because hyperthyroid cases have a great tolerance for morphine). His temperature was 99, pulse 140. His blood pressure was 110 systolic, 60 diastolic. His abdomen was extremely rigid with marked tenderness in the epigastrium. Leucocyte count was 12,500, urinalysis was normal. Fluoroscopic examination for free air in the peritoneal cavity was negative. A diagnosis of perforated peptic ulcer was made and the patient was sent to the surgical room. In a series of about 150 of these cases that we have studied (fifteen of my own) we have noted the absence of shock in early perforated peptic ulcer. This man was not pale, he did not have a cold, clammy skin; on the contrary he was "burning up" as he expressed it. He had a palpable thyroid, but it was not much enlarged. He had no positive Von Graefe, but there was a slight tendency to stare and a very slight exophthalmos. In the surgical room his pulse had reached 160. We now knew that we were dealing with exophthalmic goiter and measures were instituted to combat his acute hyperthyroidism. We closed the perforation with interrupted sutures of silk in two layers, then fastened a piece of omentum over the defect. This patient made an uneventful recovery, leaving the hospital two weeks later with a pulse rate of 90. We shall perform a thyroidectomy upon him later.

Another case illustrates acute thyrotoxicosis in a surgical emergency. We saw a young woman, Mrs. I. C., six months ago with acute intestinal obstruction. She was twenty-nine years of age. Upon admission to the hospital she was quite toxic. Her pulse was 130, temperature 98.6. She was extremely excitable and restless. About two years prior to her admission she had a pelvic operation the exact nature of which we were unable to learn. Her husband had noticed extreme restlessness of late, with "hysterical attacks" as he called them. She was tired most of the time and had lost eighteen pounds in weight in the last year. Her symptoms were of forty-eight hours' duration. They consisted of persistent vomiting, inability to pass flatus, absolute constipation and some distension. She was quite pale, but her skin was warm and moist. She complained of being very warm.

The urine was normal. The leucocytes numbered 13,000, erythrocytes 4,150,000 and hemoglobin (Dare) seventy-eight percent. In spite of the administration of 1,000 cubic centimeters of normal saline intravenously her pulse continued to rise, reaching 150 in the surgical room. There was a slight enlargement of the thyroid gland, some exophthalmos and the stare. We made a diagnosis of intestinal obstruction with complicating hyperthyroidism and we instituted appropriate treatment immediately. Then we operated upon the patient and performed an enterostomy (Witzel type) under local anesthesia. This patient improved rapidly. On the seventh day post operative, she had a large liquid stool through the normal channel. Her obstruction evidently had released itself spontaneously. During this time the pulse had come down to 90, where it remained, due to the continuous treatment with Lugol's solution and rest. Since this time her basal metabolic rate was determined; it is plus-thirty-two.

Too many case reports soon become tiresome; however, I wish to report one more to illustrate the mental phase of acute thyrotoxicosis. A colored girl, unmarried, M. W., age fifteen, was admitted to the Indianapolis City Hospital on October 23, 1929. Her chief complaint was pain

in the left lower abdomen. She had been delivered in the home of a normal full-term baby six days prior to her admission in the hospital. Her temperature was 103, pulse 140. She was sent to the obstetrical service for diagnosis and treatment. Her case was diagnosed as puerperal sepsis. After ten days the pulse and temperature remained high. The patient had developed a persistent cough. Medical consultation was invited and a right-sided empyema was discovered. The girl was losing ground rapidly. Her temperature varied between 101 and 103, but her pulse remained around 120-130. X-ray examination revealed marked density in the lower two-thirds of the right chest. She was now transferred to the surgical service. I did not see the case at first, but asked Doctor Hathaway to do a thoracentesis so that we might prove the empyema. Doctor Hathaway reported that this had entailed a great struggle with the patient, but was ultimately accomplished and some thick pus withdrawn. Her urine at this time was negative, pulse 120, temperature 100. Blood culture negative, sputum negative for tubercle bacilli; hemoglobin, eighty percent; red blood corpuscles, 4,200,000; white blood corpuscles, 18,500.

| DIAGNOSIS | ACUTE THYROTOXICOSIS | DELAYED SHOCK | INTRA ABDOMINAL HEMORRHAGE | PERITONITIS |
|-----------------------------|--|---|---|---|
| General appearance. | "Thyroid Type." Face flushed. Patient talkative and alert. | Face is pale. Lips cyanotic. Patient apathetic. | Face is pale. Lips pale. Patient anxious. Not talkative. Yawning. | Patient shows pain. Hippocratic facies. |
| Motor activity. | Extreme restlessness. Marked excitability. | Reduced activity. Often motionless. | Restlessness present. Recurrent fainting spells. | Patient motionless. Lies on back with knees flexed. |
| Cerebral activity. | Lessened emotional control. Delirium common. | No emotion shown. Delirium sometimes. | No emotion shown. Delirium sometimes. | No emotion shown. Delirium common. |
| Skin activity. | Profuse sweating, but skin red and warm. Dermographia. | Profuse sweating but skin is cold. | Skin is cold. When shock occurs, cold and clammy. | Some sweating. Skin is hot. |
| Gastro-intestinal symptoms. | Some thirst. Vomiting and diarrhea common. | Some thirst. Vomiting and diarrhea may occur, not common. | Extreme thirst. Vomiting may occur and may be bloody. Diarrhea not common. | Some thirst. Usually vomiting. Usually constipation. |
| Eyes. | Stare present. Often exophthalmos. Eyes wide open. | Eyes fixed on some object. Pupils dilated. Oblivious to surroundings. Eye lids often closed. | Blurring of vision due to retinal anemia. Pupils widely dilated and react slowly to light. | No change. |
| Thyroid | Usually enlarged. Often pulsating. | No change. | No change. | No change. |
| Pulse. | Rapid and increasingly so. Good volume. | Rapid, not increasingly so. Poor volume. | Pulse rapid and weak—increasingly so. | Pulse rapid and "wiry" at first, then soft. |
| Blood pressure. | Elevated systolic. Normal or low diastolic. | Very low systolic and diastolic. | Very low systolic and diastolic. | Lowered systolic and normal or lowered diastolic. |
| Temperature. | May be normal or elevated even up to 103-104 degrees. | Temperature is subnormal. | Temperature is subnormal. | Chill is common, then high fever. |
| Respiration. | Increased, then sighing. | Increased, then may be sighing or Cheyne-Stokes type. Shallow. | Increased. Marked dyspnea. "Air hunger." | Respirations rapid and shallow, due to toxemia pain and distention in abdomen. Expiratory grunt. |
| Heart action. | May be irregular. Auricular fibrillation, common. | Usually rapid, irregular and weak. | Regular and rapid and weak. Later fluttering. | Regular and rapid; later it becomes weak. |
| Blood picture. | No change. | Very little change unless complicated by hemorrhage. | Hemoglobin markedly reduced. | High leucocyte count. Relative increase in Neutrophils. |
| Abdominal signs. | Very few. | None unless caused by hemorrhage, peritonitis or intestinal obstruction. | Dullness in flanks, or shifting dullness or tumor mass. | Rigidity of abdominal walls, followed by distension. Marked tenderness over abdomen. |
| Time of Onset. | May be any time. | Within 24-48 hours as a rule. | Anytime, usually within 24-36 hours. | Usually about fourth day. |

CHART OF DIFFERENTIAL DIAGNOSIS BETWEEN ACUTE THYROTOXICOSIS, SHOCK, HEMORRHAGE AND PERITONITIS

I saw the patient on December 1, 1929. She was in an individual room off the ward. This was done because of her flights of delirium. As I entered she began to cry. Her pulse was 140. Her eye lids were separated widely so that the sclera was visible all around the iris. She was cyanotic. A small enlargement of the thyroid gland was visible. She watched my every move. As I started to feel her thyroid she grabbed my hand and attempted to bite it. An examination was impossible because of her maniacal state. A diagnosis of acute thyrotoxicosis was made because of the rapid pulse, "stary" eyes, extreme restlessness and mental symptoms. Also because of a history of vomiting and diarrhea intermittently. She was put on compound solution of iodine and in six days returned to a normal, quiescent state. On December 7, 1929, a rib resection was done under gas anesthesia. The empyema cavity was evacuated. The pulse rose to 120 in the surgical room, but soon came down to 95. She left the hospital on January 4, 1930, with normal temperature, feeling fine, pulse of 90. This girl must be watched.

Post-operative Hyperthyroidism: This condition has been noted frequently by us all. Perhaps the best way to describe it is to report a case. A woman, age thirty-seven, Mrs. S., came to my notice in June, 1929. She was the mother of two children, one nine years of age and the other twelve. She had an acute pelvic inflammation which had now subsided. In addition she had multiple fibromyomata of the uterus. Her pulse was 84, temperature 98. We operated upon her, doing a supravaginal hysterectomy. We were unable to save either ovary because of the marked involvement. She made an excellent convalescence until the seventh day post operative. At this time she began to complain of being very hot and "feverish" and extremely restless. She vomited twice, there was no diarrhea. Her face was flushed. Her temperature was 101.4, pulse 140. She was sweating profusely. She was crying most of the time. The nurse reported that she was irrational at times. Her respirations were increased. The thyroid was enlarged—no exophthalmos was present. Presented with this picture we have a perplexing problem. Is it an intra-abdominal hemorrhage? Is it delayed shock or is it peritonitis or even post-operative intestinal obstruction?

In the table of differential diagnosis we have tabulated some of the outstanding differences between these conditions. After satisfactorily ruling out the different possibilities we made a diagnosis of acute hyperthyroidism. The patient was given Lugol's solution and soon recovered. In July, 1929, her basal metabolic rate was plus-twenty-nine. Since this time we have performed a thyroidectomy upon her and she is now in good health.

The Treatment: The treatment of acute thyro-

toxicosis is most effective when used early. If used late it is not as potent because we no longer have the problem of reducing thyroid toxicity alone, but also combating its effects; namely, dehydration, fuel deficiency, over-driven metabolism and over-activity of all body functions. Therefore, if the condition is recognized early, treatment is instituted easily and is effective. Moreover, it combines readily with the treatment of shock, hemorrhage and the toxemia of intestinal obstruction or extensive burns.

First, we must strive to reduce toxicity. This is best accomplished by saturating the thyroid with iodine. In emergencies where patients are unable to take iodine by mouth we may give it by hypodermoclysis—fifty minims of Lugol's solution in 1,500 cc. of normal saline; or intravenously sodium iodide solution thirty-one grains in 1,000 cc. normal saline and glucose. Lastly we frequently give it by proctoclysis, sixty drops of Lugol's solution in 500 cc. normal saline by the continuous drip method. This is repeated three times in the course of twenty-four hours. In acute hyperthyroidism occurring post operatively where the patient is able to take iodine by mouth we give twenty to thirty minims of compound solution of iodine three times a day.

Second, we must supply our patients with fluids and fuel. The former because of the sweating, vomiting and diarrhea and lack of intake, and the latter because of the high metabolism and abstinence from food. If permitted to go on, our patients soon feed upon their own tissues for the glycogen reserve is low in thyrotoxicosis. To accomplish this second indication give one hundred grams of glucose in 1,000 cc. normal saline—the sodium iodide may be added here, thus accomplishing the treatment at once. Take one-half to one hour to give this solution so that a great part of the glucose is not lost through kidney elimination.

Third, we must attempt to reduce metabolic activity. This is accomplished best by rest, and morphine. No visitors are permitted, a quiet room, darkened and noiseless, is obtained, if possible. Morphine may be given in large doses as these patients tolerate it well. Scopolomine in 1/200 grain doses hypodermically or phenobarbital, 4 to 6 grains by mouth or per rectum may be given to control delirium.

Fourth, all other symptoms that are menacing the patient must be controlled. Gastric dilation may occur and should be treated promptly by repeated gastric lavage. Marked abdominal distension may be helped by the passage of the colon tube or enemata. Excessive sensation of heat is relieved by cooling sponge baths. In other words, every effort is made to quiet down the patient, and this is done best by attempting to make him comfortable.

Lastly, the treatment must be continued long after the immediate crisis is over.

SUMMARY

1. Acute hyperthyroidism is not rare.
2. It may arise after being stimulated by a surgical emergency.
3. Like shock and hemorrhage, thyrotoxicosis must be treated before surgical intervention is attempted.
4. The mortality of this complication is high if untreated.
5. Hyperthyroidism may arise post operatively and should be controlled promptly to prevent an acute thyrotoxic crisis.

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THE NEXT IMPORTANT STEP IN ADMINISTRATIVE PUBLIC HEALTH IN INDIANA

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The most important matter to be considered by the medical profession in Indiana at this time is that of providing a more adequate health promotion service for the people of Indiana and to insure that this health service shall be headed up by men and women who are medically trained rather than by nurses or laymen. The present health law of Indiana was enacted in 1899, and while this law has been amended in some particulars since that time there has been no change in that part of the law governing county, city and town boards of health and health officers. Under this law the salary of county health commissioners is fixed at one and one-half cents per capita on the population of the county, with a maximum salary of \$1,500 per annum. The salary of city and town health officers is fixed at two cents per capita on the population of cities and incorporated towns. The same maximum salary of \$1,500 applies to cities, so that no health officer in any county or city of Indiana, regardless of population, may receive more than \$1,500 per annum. It will be seen that the administrative work of any health officer becomes secondary and must be subordinate to his other work, professional or otherwise, by which the health officer earns a living. All health officers in Indiana are therefore of necessity part-time health officers who are engaged primarily in some other business, occupational or professional, and who give as little time as possible to their duties as health officer. Many of these part-time health officers are not physicians and the proportion who are not physicians is constantly increasing because competent physicians cannot afford to and will not take the job.

Since the present Indiana health law was enacted in 1899, practically every other state of the union has developed county and city health departments on a full-time basis and such health departments are being rapidly extended. At the beginning of 1930, five hundred and five counties in thirty-eight states were maintaining full-time county health departments and practically every city in the United States having a population of more than 50,000 has a full-time health department. Indiana is one of the few states in which there is not a single full-time county health department, and but one city in Indiana, the capital city of Indianapolis, has a full-time health department. Indianapolis has a full-time health department because it is governed by a special charter as a city of the first class and this special charter provides for a full-time health department. Under the present health law it is impossible for any county or any city or any district composed of more than one county, to establish and maintain a full-time health department.

Health authorities and medical authorities are universally agreed that the county is the logical unit for public health administration, the only exception being in the case of larger cities having a population of above 50,000. Actual experience with actual results accomplished over a considerable period of years furnish abundant proof for this. For smaller counties with limited resources the practical unit is that of a health district made up of two or more such counties with a full-time health department for such district. A full-time health unit for a county should consist as a minimum of a full-time medical health officer, a full-time public health nurse, a full-time sanitary officer, with an office clerk and a central office, known as the county health office. Such a full-time health unit is not an experiment because such units and in very many instances larger units, are in successful operation in thirty-eight states. The effectiveness of such units in promoting public health and in promoting better medical service has been demonstrated beyond any doubt.

Indiana is not keeping pace with other states in public health administration. This is not because of opposition to better health administration, nor is it because the people of Indiana are not health-minded. It is because our present laws will not permit the organization of our public health work on a sound and proven basis under official direction, and for this reason much of the direction of public health work in Indiana has been taken over by lay organizations as a matter of necessity. As a matter of fact the people of Indiana want the best in both health service and medical service, and if this cannot be secured through official channels, efforts will be made to secure it in some other way. The people of Indiana do not want state medicine, the medical profession does not want state medicine, and health authorities do not want state medicine. What the public does want is the

best that medical science provides, and it still prefers to receive treatment for its ills and information on how to prevent illness and maintain health from the authoritative source of scientific medicine rather than from any other source. What is lacking in Indiana is the machinery through which the best in scientific medicine, both curative and preventive, can be made available and usable to all the people of the state.

The cost of full-time health protection and health promotion is reasonably within reach of any average county or average larger sized city. It has been shown by experience that in an average county with a population of from twenty thousand to thirty thousand the cost of maintaining an adequate health service does not exceed fifty cents per capita a year. The average cost varies from ten thousand to fifteen thousand dollars per year. It is literally true that within certain natural limitations a community can buy its death rate. It can have a death rate of fourteen or fifteen per thousand population for nothing, or it can buy a death rate of nine or ten per thousand of population, if it thinks the saving of four or five lives among every thousand of its people worth the price needed to save them. More than fifty percent of the population of Indiana is rural. Not only this rural population but a large percent of urban population is unprovided with official health service, even approaching adequacy. As a consequence of this deficiency there is a sacrifice of the health and lives and of the material resources of our people every year—a sacrifice which is needless because preventable and preventable by measures readily within our means and demonstrated to be in the highest sense economical. President Hoover's message to the Seventy-first Congress includes a clear statement of the value of adequate full-time public health units as follows:

"The advance in scientific discovery as to disease and health imposes new considerations upon us. The nation as a whole is vitally interested in the health of all the people; in protection from spread of contagious disease; in the relation of physical and mental disabilities to criminality, and in the economic and moral advancement which is fundamentally associated with sound body and mind. The organization of preventive measures and health education in its personal application is the province of public health service. Such organization should be as universal as public education. Its support is a proper burden upon the taxpayer. It cannot be organized with success, either in its sanitary or educational phases, except under public authority. It should be based upon local and state responsibility, but I consider that the Federal Government has an obligation of contribution to the establishment of such agencies.

"In the practical working out of organization, exhaustive experiment and trial have demonstrated that the base should be competent organization of the municipality, county or other local unit. Most of our municipalities and some 400 rural counties out of 3,000 now have some such unit organization. Where highly developed, a health unit comprises at least a physician, sanitary engineer and community nurse, with the addition, in some cases, of another nurse devoted to the problems of maternity and children. Such organization gives at once a fundamental control of preventive measures and

assists in community instruction. The Federal Government, through its interest in control of contagion, acting through the United States Public Health Service and the state agencies, has in the past, and should in the future, concern itself with this development, particularly in the many rural sections, which are unfortunately far behind in progress."

The medical profession of Indiana certainly does not want administrative public health work to be taken over by laymen, by public health nurses, or by any other, except by those trained in scientific and preventive medicine. The present tendency, however, is toward this very thing and unless laws can be secured under which public health administration can be carried out by trained and experienced medical leadership, other laws are certain to be enacted that will make it necessary for non-medical leadership to direct administrative public health work in this state.

The one great health legislative need in Indiana today is for a permissive health law under which counties and larger cities may establish, maintain and develop, full-time health departments to carry on constructive programs of public health protection and promotion. Such a law, of course, should be optional with the people of a county or of a larger city, but its provisions should be broad enough to permit the people of a county or of a larger city to establish and to maintain such full-time health departments as would be most adequate to their health needs, within a maximum limit of public expenditure to be fixed in the law. Provision should be made for the necessary personnel, which, as a minimum, should include a medically trained health officer, serving full-time, with such public health nurse or nurses, sanitary inspector or inspectors, clerical assistants and such other personnel as experience might show to be necessary. For smaller counties with limited resources, provision should be made for health districts composed of two or more counties, with one full-time health department for the district. A bill for a permissive law of this kind will be presented at the next session of the Indiana legislature in January, 1931. A proper bill for this purpose should have the full support and approval of the medical profession of the state, because a law of this kind is in the interest of scientific medicine. Full-time county health units and full-time health departments in larger cities are approved and supported by the organized medical profession in every state in which they have been established, because they have demonstrated their value, not only to the public generally, but to the medical profession as well. The U. S. Public Health Service, the Rockefeller Foundation, and practically all national health organization advocate the full-time county health unit as the best solution of the rural health problem. Bills before Congress, which will undoubtedly be enacted into law at the next session, provide for federal aid and co-operation in establishing an adequate health service for rural com-

munities throughout the United States. Results of the study being made by the White House Conference on Child Health Protection will undoubtedly show the need of more adequate health service, through better organized health departments, in rural communities and even in cities where such organizations do not exist.

If Indiana is to keep step with other states in promoting and protecting the health of its people there must be provision for better and more adequate local health administration. This can be brought about only through a law giving counties and larger cities the right to establish and maintain well organized, trained, full-time health departments under the direction of medically trained full-time health officers supported by the medical profession, co-ordinated and assisted by a thoroughly organized state health department. The opportunity to take this important forward step will be presented at the next session of the Indiana legislature. *Let's do it.*

PRESENT STATUS REGARDING THE ETIOLOGY OF GASTRIC ULCER

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The purpose of this paper is to enumerate and correlate the most recent theories regarding the cause of ulcer of the stomach.

Any discussion of the etiology should, first of all, differentiate between the true gastric ulcer and the duodenal ulcer. In speaking of ulcer, we are apt to refer to the patient with "ulcer symptoms," using the terms "stomach ulcers," "peptic ulcers," "gastric ulcers," "duodenal ulcers," etc., more or less indiscriminately and then treat the ulcer syndrome. This is, in the opinion of many, a grave error, because there are gross differences from anatomical and pathological standpoints, and on the basis of prognosis for the individual so afflicted with these "ulcer symptoms."

Richard H. Miller¹ in 1928, after careful study of the literature, as well as detailed study of his own cases, concluded that duodenal ulcer is never malignant and never becomes so, while gastric ulcer frequently cannot be distinguished from early cancer and is considered by many to be the forerunner of cancer. To confirm the above, we note that W. L. Wellbrock² of the Mayo Foundation reports that in a series of one hundred excised and resected small gastric lesions, all chronic gastric ulcers were definitely suspicious, microscopically, of beginning malignancy, and concludes by saying that he believes they should be treated as such, namely, by operation. W. J. Mayo is alleged to have stated that he considers ulcers of the duodenum benign, and that in definitely demonstrated duodenal ulcers he did not operate until it had been cured medically at least nine times. McVicar states that he considers duodenal ulcer like a hernia in that "when a patient

becomes tired of fussing with it, operation can be done." From the opinions of these men it is evident that duodenal ulcer can be considered as a benign lesion, whereas ulcer of the stomach should be considered as a precancerous condition. Thus palliative treatment of a duodenal ulcer may mean unpardonable delay should the lesion be in the stomach proper, the prognosis of the two being so vastly different. We should be very careful in our diagnosis and terminology.

Ulcers are either gastric or duodenal depending upon their location and should be treated accordingly, in view of the malignant possibilities of those of the stomach as compared to the benign characteristics of those located in the duodenum. With this differentiation in mind, I wish to outline the predisposing factors in the etiology of ulcer of the stomach proper, and point out some of the plausible reasons why these ulcers are potentially malignant, while those of the duodenum are not.

In regard to the incidence, the late B. W. Sippy³ stated that in five percent of all autopsied deaths from various causes, there are either open, or evidence of healed, peptic ulcers—that is, either gastric or duodenal ulcers. Robertson and Hargos,⁴ of the Mayo Clinic, in 1925 stated that nineteen percent of all autopsies showed ulcers, and that of this nineteen percent about sixty-five percent were duodenal and thirty-five percent gastric; and, incidentally, about only two percent occurred in the stomach after gastro-enterostomy with far fewer recurrences when the gastro-enterostomy was done for true gastric ulcer than when it was done for duodenal ulcer. Averaging these two percentages, five percent by Sippy and nineteen percent by Hargos, we find that, conservatively speaking, twelve percent of all autopsied deaths show evidences of ulcers, active or healed, but that, fortunately, there are twice as many demonstrated in the duodenum (which can be considered benign lesions), as there are in the stomach where they are potentially malignant; and of greater importance is the fact that recurrences after properly executed gastro-enterostomy for duodenal ulcer is less than two percent and recurrence after gastro-enterostomy for the potentially malignant true gastric ulcer is almost nil.

The ulcers of the stomach vary in size from pinpoint areas to ulcerated surfaces covering the greater part of the stomach. Twenty percent of cases autopsied show two or more ulcers and as many as five or six have been recorded, especially in infectious diseases. The ulcers vary in depth from mere superficial lesions to deep ones involving the peritoneal surfaces.

The location of the ulcers in the stomach are distributed as follows (Sippy³):

- 35 % in the lesser curvature.
- 30 % in the posterior wall.
- 12 % in the pylorus.
- 9 % in the anterior wall.

- 6.5% in the cardiac portion.
- 3.5% in the greater curvature.
- 3 % in the fundus.
- 1 % in the cardiac orifice.

Grouping these percentages, we note that seventy-five to eighty percent of all the ulcers of the stomach proper are located in a relatively small area on the posterior surface of the lesser curvature near the pyloric orifice; as Sippy used to say, "In an area not larger than a silver dollar."

There must be some definite reason for this restricted location of gastric ulcers. First of all we know that, for an ulcer to develop any place in the body regardless of location, there must be an area of malnutrition with a break in the continuity of the surface membrane followed by necrosis and subsequent ulcer formation. In gastric ulcer the same general law applies. Sippy outlines the process briefly by stating that an area of stomach mucosa loses its resistance, through malnutrition, injury or necrosis, to the peptic action of the gastric juice and this area becomes digested with a resulting defect—the ulcer.

L. Fischl⁵ of Germany states that, after thirty years of continuous study on patients with gastric ulcer, he has never detected a case where achylia gastric was present, and, whenever tests revealed the entire absence of hydrochloric acid and pepsin, the diagnosis of gastric ulcer was later proven erroneous. That tends to bear out Sippy's contention as to the importance of digestive action of the gastric juice high in hydrochloric acid.

Then to offer a plausible explanation as to why these ulcers usually are located in such a small, restricted area near the pylorus, we must seek a cause for malnutrition of the area, as well as an explanation for the high, persistent acidity, plus any other possible causative factors detectable.

Virchow, as early as 1855, emphasized the role possibly played by the blood vessels of this area. Anatomically, there may be a reason for lowered vitality of the part, as pointed out by Einhorn⁶ in discussing the vascular supply of the ulcer area. The arterial blood supply of the stomach is derived from branches of the celiac trunk.

There are two arterial anastomotic circles which form along the lesser and greater curvatures. The lesser curvature is supplied by the smaller circle composed of an anastomosis between the right gastric (branch of the hepatic artery) and the left gastric (a branch of the celiac axis) which anastomose in the region of the incisura angularis. The larger circle is along the greater curvature and is formed by the right gastro-epiploic (a branch of the gastro-duodenal) and the left gastro-epiploic (a branch of the splenic artery), with anastomose near the pyloric area. It is noted that the upper part of the stomach receives its blood supply from three different branches, namely, the left gastric, the left gastro-epiploica, and from the vasa brevia (branches from the splenic direct to the greater curvature),

while the pyloric area is supplied by two branches only, the right gastric and the right gastro-epiploic.

Reference to your anatomy⁷ will reveal that the left gastric arises direct from the celiac axis as a main artery. Also the left gastro-epiploic and the vasa brevia are large branches of the splenic. Thus the upper part of the stomach has a very vascular supply from direct trunks of the celiac axis. Now the pyloric area, as before stated, has only two arteries supplying it as compared to the upper portion's three, and, moreover, both the right gastric and the right gastro-epiploic arteries are smaller branches of the hepatic artery. Thus the pyloric area has but one possible source of blood supply—from the hepatic artery—and there is no other possible route by which a reserve blood supply can be tapped in case of an emergency, while in the upper portion the arteries arise independently from the main celiac trunk. Therefore, the fundic (upper) stomach receives a greater amount of blood through three vessels which has traversed a shorter distance through two direct arterial highways while the pyloric area has only two vessels which necessitates a longer course because the blood must traverse the hepatic artery first as these pyloric vessels are branches of the hepatic and not direct routes from the celiac trunk. The distance being greater, the blood flow per volume is less in the pyloric area. Thus we note that this whole area is somewhat anemic as compared to the rest of the stomach.

In the lesser curvature, the finer branches which pierce the submucosa are scarce in number and tortuous in character as is proven by injection of dye. They anastomose infrequently and are essentially terminal vessels so far as function is concerned.

Moreover, this pyloric area is subject to frequent, deep, forcible muscular contractions, which reach the maximum of intensity as the pylorus is reached. On contraction, these small, sparsely situated vessels are compressed and refill slowly, causing a large area of long temporary anemia. The tortuosity of the vessels, the frequent trauma by contraction and the more or less mechanical injury to their walls by these contractions all favor circulatory interference by reason of easy blocking and are especially liable to favor foci of anemia as do terminal vessels of the eye, brain or kidney. Berlet has proven quite definitely that these terminal vessels are predisposed to circulatory disturbances and are deficient in ability to develop collateral circulation. Frevot⁸ believes, moreover, that there may be a familial tendency toward anomalous scarcity of small vessels in this pyloric area.

Cole⁹ also points out the fact that, in the upright position, the stomach sags somewhat, which also puts the area on more or less tension and shows by hardened specimens the relation of ulcer to the distribution of vessels. In view of this he recommends reclining posture in treatment, at

least part of the time. By the scarcity of vascular supply in the region of the sulcus angularis and the mechanical obstruction afforded by the sulci, Cole explains corporic ulcer.

Another factor to bear in mind is the difference in the muscular coat of the stomach. The fundus is relatively thin walled with oblique fibers while the pyloric area has thick longitudinal as well as circular fibers which are necessary for the rigorous contractions but which work havoc on the small vessels which they compress. The other layers, namely, the submucosa, is likewise thicker and firmer in texture. The mucosa of the pyloric area differs from the mucosa in the fundus in that the pyloric area is thicker and closely attached to the submucosa with numerous convolutions. The longitudinal mucosal folds in the lesser curvature are on tension while they are relaxed in the fundus along the greater curvature.

The pylorus is essentially an alkaline secreting area, while the fundus is essentially acid secreting in nature. The pepsin secreting cells are also in the fundus. It is significant to note that the acid secreting cells extend only about sixty percent of the distance from the cardiac orifice to the pylorus along the lesser curvature, compared to extending at least eighty percent of the distance along the greater curvature. The change from the acid secreting portion of the stomach to the alkaline portion is not at the point on the lesser curvature as it is on the greater, but higher up and, therefore, the acid secreted in the fundus strikes the alkaline type of cells on the lesser curvature early in the descent. Also the alkaline regurgitation through the pylorus back into the stomach naturally would reach the demarcation line between the acid cells and alkaline cells last, because it is at a higher level. Thus, theoretically at least, these demarcation type alkaline mucus secreting cells are the first to receive the acid and the last to be alkalinized by regurgitation.

This brings up the importance of the acid. The most recent and present conception of stomach acidity is that, according to Benzley and Harvey,¹⁰ the parietal cells do not produce actual hydrochloric acid, but secrete an alkaline forerunner of it which is changed to acid outside the cells. Boldyreff¹¹ has proven quite conclusively that the acidity of the stomach is normally constant, free hydrochloric acid of .4 to .5 percent, and if it varies it is because of reduction by other substances. He alleges that it is always high, but that duodenal alkaline regurgitation takes place back through the pylorus, neutralizing the acid back to a normal level. Animal experimentation on dogs practically has proven this to be the normal physiological method of controlling excessive acidity of the stomach.

Morton¹² definitely produced experimental ulcers in dogs to prove acidity as a definite cause of the lesions. He first produced experimental ulcers in dogs that were normal and then in dogs

in which the alkaline duodenal secretion had been sidetracked so that it could not possibly get into the stomach. He produced the so-called surgical duodenal drainage in which the duodenum was isolated from the stomach and the upper jejunum cut across and put into the terminal ileum, while at the same time, below where it was cut, was anastomosed to the pylorus. In this way gastric contents were propelled directly against the jejunal wall, while the alkaline duodenal contents emptied direct into the ileum close to the cæcum. In dogs in which he had not performed the above operation he produced experimental ulcers. These ulcers, produced in dogs in which the duodenal secretion could regurgitate back into the stomach, healed spontaneously. Now he produced experimental gastric ulcers in dogs in which he had performed the above operation so that the alkaline duodenal secretion was sidetracked so that it could not possibly get into the stomach and he at once noted that the ulcers on the lesser curvature of these latter dogs did not heal, but became chronic just like those in the human. In one hundred percent of the cases, a chronic jejunal ulcer was formed where the stream of acid stomach contents struck against the intestinal wall. These facts prove the importance of acid in the production of ulcers, and likewise the importance of regurgitation of alkaline duodenal secretion to neutralize the excess acidity. Thus an impairment of duodenal regurgitation is most certainly a factor in permitting a persistently high gastric acidity and favors malignancy by continued irritation.

Incidentally, this puts a new light on the physiology of the stomach, for Cannon insisted that the acid on the stomach side caused the pylorus to open, and that when the acid passed through the pylorus to the duodenal side it made the pylorus close. Devine¹⁸ and Klein,¹⁹ on the other hand, insist that the chyme and waves alone will force the pylorus to open, and the duodenal alkaline secretion controls the degree of stomach acidity by regurgitation through the pylorus into the stomach. Thus, instead of the acid controlling pyloric activity, the pyloric activity controls the acid, and, if the acid gets high due to lack of duodenal regurgitation, ulcer is apt to result. A stricture or spasm of the pylorus would hinder alkaline regurgitation. Also any factor which increases acidity certainly must be considered a contributory cause.

Gray¹³ reports that smoking is an etiological factor, for in a study of one thousand cases he found that smoking caused a hyperacidity in one-third of his series, with clinical improvement and reduction to normal acidity after cessation of smoking.

Other experimental studies that must be mentioned, in regard to the etiology of gastric ulcer, are those of Rosenow¹⁴ of the Mayo clinic. He showed that ulcer of the stomach is associated often with streptococcic infection in the ulcer area;

that streptococcic infection of teeth, tonsils or nose favor streptococcic stomach ulcers; and that streptococci isolated from the ulcer and from the demonstrated foci (teeth or tonsils) each has an affinity for stomach mucosa and each produces ulcers in the lesser curvature upon injection into the blood stream.

Nakamura¹⁵ injected about thirty rabbits with streptococci isolated from the tonsils of a male patient with ulcer and twenty-three of these rabbits developed gastric ulcers in the pyloric area. Then these same streptococci were reisolated from the ulcers. The same has been proven by Haden¹⁶ in the case of abscessed teeth.

Gastric ulcers have been demonstrated as a complication to embolic diseases, tuberculosis, syphilis and burns.

Dr. G. W. Crile¹⁷ believes that ulcers are explainable partially by the fact that hyperacidity and hypermotility are both very necessary for ulcer development, and that this hyperacidity and hypermotility are in turn controlled by the nervous system and the thyroid and suprarenals, which exhibit a reciprocal relation. Crile reports a partial thyroidectomy and suprarenalectomy in five cases of intractable or recurrent ulcer of the stomach, followed in every case by a decreased gastric motility and disappearance of the ulcer symptoms.

We note that gastric ulcers usually are located at an anemic point where the mucosa cells are in a transitional state, that is, near the demarcation line between acid and alkaline secreting cells. Furthermore, that this location is subject to trauma by contractions and food, and is subject to chronic irritation by the varying degrees of acidity. All these factors favor malignancy of the stomach ulcer over that of the duodenal ulcer.

CONCLUSIONS

1. Ulcers of the digestive tract should be classified as to anatomic location.
2. The combined incidence of gastric and duodenal ulcer may reach twelve percent—as determined by routine autopsies: the incidence of duodenal ulcer is approximately twice that of gastric ulcer.
3. Duodenal ulcers are relatively benign and remain so indefinitely. Gastric ulcers are potentially malignant and should be treated accordingly.
4. The incidence of occurrence after gastro-enterostomy for duodenal ulcer is less than two percent. After gastro-enterostomy for gastric ulcer, recurrence is practically nil.
5. The exact etiology of gastric ulcer is indefinite, but the following points must be stressed for consideration: there is a constant physiological anemic area on the lesser curvature near the pylorus, due to inadequate blood supply; the small capillaries of the pyloric area are very tortuous and have terminal vessel characteristics, favoring emboli from distant foci of infection; hyperacidity and

hypermotility are present due to inadequate alkaline duodenal regurgitation into the stomach or to overactivity of the thyroid and suprarenal glands through their reciprocal relation to the nervous system, or a combination of the two. Strong, deep muscular contractions in the anemic pyloric area further transient periods of pinpoint anemia by compression of the tortuous terminal capillaries. Rigorous contractions and food may produce mechanical injury to the anemic mucosa. From one or all of the above factors, small areas of anemic necrosis may develop, and the digestive action of the gastric juice, high in acidity, produces an ulcer.

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DIPHTHERIA: ITS PATHOLOGY*

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Until Bretonneau (1821-26) as a result of his study of the inflammatory processes affecting the mucous membrane of the upper respiratory tract and pharynx described the clinical criteria of diphtheria, this malady was unrecognized as a distinct

*This is the fifth of a series of papers endorsed by the Diphtheria Committee of the Indiana State Medical Association.

disease entity. By his predecessors and contemporaries the laryngeal form of diphtheria was known as croup; the faucial and pharyngeal type as malignant angina. Each was regarded as a separate disease.

It was he who recognized and taught that the formation of a firm, leathery exudate on the surface of the mucous membrane was a distinguishing characteristic common to both conditions, and that therefore they were probably one and the same disease process, differing only in location. To this morbid process he gave the name *diphtherite*, translated literally, diphtheritis—i. e., an inflammatory process of mucous membrane characterized by an exudate resembling a *skin*. And from this term has evolved the present name diphtheria.

Following Bretonneau the histology of the lesions of diphtheria was studied by Virchow and his followers (1847). These studies yielded valuable information concerning the tissue changes occurring in diphtheria and in inflammations of the mucous membranes in general, but they did not succeed in firmly establishing Bretonneau's conception of this affection as a specific disease. In 1883 a bacteriological study of the lesions was made by Klebs, who in the same year reported that he had observed and could demonstrate certain small bacilli, some with spores at either end, in the lesions and membranes of this disease, and that he regarded these as the true cause of the affection.

Confirmation of these observations and additional facts concerning the specific nature of the lesions of diphtheria sufficient to establish it as a specific disease was forthcoming in the epoch-making researches of Loeffler, published in 1884. He described methods for the demonstration of the specific organisms in the tonsillar membrane for the isolation of the bacilli in pure culture, and for their pathogenicity for animals. In this work he stated that in experimental animals he found characteristic systemic lesions and expressed his belief that they were not due to dissemination of the bacilli throughout the body of the animal, but to some poison which circulated in the blood, and which originated from some action of the bacilli in the local lesion at the point of inoculation; a conception bearing a striking resemblance to that now held regarding human diphtheria.

The scientific basis for the pathogenesis of the lesions of human diphtheria was provided by the observations of Roux and Yersin in their memoirs published in 1888-90 in which they recorded their discovery of diphtheria toxin and indicated its nature and action, and the part it played in producing human disease. Thus in the space of some sixty years an intensive study of the lesions of an affection, hitherto confused with similar conditions, had served to set it apart as a definite clinical entity, with scientific facts establishing its etiology, histology and pathogenesis.

As is well known, the diphtheria bacillus (*Corynebacterium diphtheriæ*) is one of the few micro-organisms pathogenic for man that produces a strong toxin. The lesions of diphtheria are due to the action of this toxin. Since the toxin is quite diffusible and readily absorbed, the lesions are to be found not only at the point of infection, but also in other tissues of the body to which the injurious agent less concentrated, but still potent, is carried by the blood and lymph.

The initial lesions of diphtheria may occur on any of the more exposed mucous membranes of the body. Although appearing occasionally on the conjunctiva or about the genitalia, they usually develop about the nose and throat. In this location, according to Councilman *et alii*,¹ the site of infection in decreasing order of frequency is the tonsils, the larynx, the nares, the trachea. From these primary sites the process usually spreads. By extension from the tonsils it may involve the pillars, the fauces, the uvula and soft palate or proceeding posteriorly cover the whole posterior pharynx. From the larynx it spreads downwards, covering the walls of the trachea and bronchi. Rarely are the walls of the minor bronchi involved. Still more rarely does the process extend to the parenchyma of the lungs. From the nares the process may spread to the nasal sinuses or less frequently extend outwards to the skin about the nose and mouth. From any of these foci the process may extend by way of the Eustachian tube and perforated membrane to the middle and external ear. Rarely do the lesions develop in open wounds, and quite infrequently in the skin.

The characteristic lesion of diphtheria is the formation of a fibrinous, inflammatory exudate. This may appear as several small, thin, grayish white spots or as one or more larger patches, which later become yellowish brown or almost black. The intervening and adjacent mucous membrane is congested intensely. In most cases the exudate rapidly thickens, forming the so-called false membrane. Forcible removal of the exudate always shows the tissue beneath to be intensely congested and frequently hemorrhagic. It usually is taught that this exudate is tough, leathery and firmly adherent and this characteristic has been used as an important diagnostic point. This is not true in all cases. Although thick the exudate may be quite granular and friable and easily removed. Or it may be present as a pellicle so thin as to escape the notice of the observer, and the congested mucosa may be mistaken for that of scarlet fever. Apparently the type of epithelium involved in the process determines the ease of removal of the exudate. In the trachea, which is lined with ciliated epithelium, the attachment of the exudate is much less tenacious than in the pharynx, which is covered by simple squamous epithelium. This explains the fact so commonly observed that the tracheal exudate loosens easily and may be coughed up while the tonsillar

and pharyngeal exudate usually persists and disappears by resolution or necrosis.

It now is recognized generally that the exudate (pseudo-membrane) is the result of the tissue's reaction to the toxin secreted by the diphtheria bacillus and the injury caused by it. Histological studies indicate that early in the process fibrin appears between the superficial epithelial cells which soon degenerate. Some hold that the fibrin is derived from these epithelial cells. The majority believe that the fibrin is derived from the plasma which exudes from the underlying congested capillaries. As the process continues, successive layers of fibrin are laid down which form a net in the meshes of which are numerous bacilli, desquamated and degenerated epithelia, and numerous leukocytes. The degenerative process occasionally extends beyond the basement membrane.

In nasal diphtheria the local lesions resemble those of the throat and larynx. The exudate is the characteristic feature. In some instances the exudate is so massive as to obstruct the nostril completely. In other cases it is so slight that it is unrecognized and the condition may be mistaken for a simple catarrhal rhinitis. In all nasal lesions either with or without a membrane there are always present diphtheria bacilli the virulence of which equals that of organisms isolated from the most severe laryngeal or pharyngeal diphtheria. Although these lesions are due to virulent, toxigenic bacilli, uncomplicated nasal diphtheria rarely manifests any constitutional disturbance. In a few cases symptoms of a very mild diphtheria may develop. There is no satisfactory explanation for this anomaly.

The occurrence of local diphtheritic lesions on other mucous membranes than those of the nose and throat is rare. Some few cases of diphtherial conjunctivitis have been reported. Councilman *et al.*¹ mention two cases proven such by bacterial cultures. In one the lesion was primary; in the other, secondary to nasal diphtheria. The majority of such cases reported lack scientific evidence of specific etiology.

Occasionally lesions with characteristic exudate develop on the genitalia. The vagina is the common site; less frequently the penis.² In most instances these are secondary to lesions elsewhere.

Local diphtheritic lesions developing in the skin are reported. Andrews *et al.*³ state that cutaneous diphtheria is more common than the literature would suggest; and that the lesions take the form of ulcerations covered with more or less membrane; or they may appear as pustules, impetigo, paronychia, and herpes.

Diphtheritic lesions with characteristic membrane may develop in wounds of the skin. Rather numerous cases were studied and proven to be such by German investigators during the Great War.

The relative frequency of occurrences of these

rarer lesions is indicated in a statistical study by Reiche.⁴ In a total of 7,314 cases, occurring in Hamburg, there were fifty-one cases of diphtherial conjunctivitis, eight of vulvitis, forty-four of cutaneous diphtheria, and eight of otitis media.

In addition to the local injury the diphtheria bacillus produces systemic lesions through the action of this toxin in the circulation. These lesions appear in the various parenchymatous tissues of the body. Clinical manifestation of cardiac injury are frequent, appearing early or late in the course of the disease and in some cases leading to sudden unexpected death, apparently due to heart failure. Some form of degeneration of the muscle fibres is the most common lesion found. Fatty changes occur in the majority of cases, especially those of an acute and severe nature. In some instances these fatty changes affect the myocardium, they suggest that some cases of fibrous and scattered foci. In more prolonged cases, other retrograde changes as hyalinization, fragmentation and vacuolization are found. According to Councilman *et al.*¹ focal collections of plasma and lymphoid cells occur at times in the interstitial tissues. Since these usually are accompanied by degeneration of the surrounding myocardium, they suggest that some cases of fibrous myocarditis may be due to this process.

Recently the tissues of the cardiac conductive apparatus in fatal cases of diphtheria have been studied. Although degenerative lesions have been observed, they are not specific in character nor constant. Nor have they been found regularly to alternate with or parallel the changes in the myocardium proper. Warthin⁵ found that the toxin showed no especial affinity for either the conducting or contractile tissue. Although the true pathology cannot be regarded as completely known at present, it seems that the lesions in the myocardium proper play the principal role in impairment of heart action and circulatory failure in diphtheria.

The circulating toxin produces lesions in other organs of the body. In the kidney the renal epithelium shows degenerative changes of varying degree, sometimes so extreme that necrosis and hemorrhage occur. In some instances the lesions are those of an acute nephritis. When interstitial changes occur, they usually are found in the cortex. Recent investigations have shown that there is no *type lesion* in the kidney in uncomplicated cases of diphtheria. In the liver generalized degeneration of parenchymal cells occurs. Councilman *et al.*¹ describe necroses, which are found chiefly in the centers of the lobules. The spleen and lymph glands present unusually prominent nodules. Microscopically, the lesions consist of collections of epitheloid cells. None of these lesions is characteristic of diphtheria and all may be found in other acute infections.

In the past lesions in the adrenals of persons dying of diphtheria rarely have been found. In

their series of cases Councilman *et al.* found none. Quite recently investigators using improved histological methods have described certain changes, principally an increase in the lipoid content and an increase in number of spongiocytes occurring in this organ. By some these changes have been regarded as suggesting that the cause of circulatory failure in diphtheria might be vascular rather than cardiac. However, more recent investigations have shown that the changes noted in the adrenals are not constant nor characteristic and at the present time there is no conclusive evidence supporting the conception that adrenal lesions serve as the basis for circulatory failure in this disease.

In about twenty percent of all cases of diphtheria some form of paralysis develops. Usually it is the soft palate or muscles of accommodation that are affected. Less frequently the limbs are involved, or muscles of the trunk or larynx. Histologic study of the involved muscles shows fatty degeneration in severe cases of long standing. Councilman *et al.* found three out of four fibers studded with fat droplets. Few or no lesions are found in cases of shorter duration. These changes alone, however, are not considered to be sufficient to account for the palsy.

The sequela is now thought to be due to the lesions in the nervous system. All investigators are agreed that in both local and general paralysis, the nerves from the palsied areas show retrograde changes. Fatty degeneration of the myelin sheath is constantly present. Later the axis cylinder swells, and may undergo degeneration. In some cases alterations in the ganglion cells of the cord and basal nuclei, and in Clark's column have been observed. Invariably the lesions in the peripheral nerves are more severe than those in the cord. The ganglion cells are not as a rule severely injured since recovery from paralysis usually occurs.

Recently Walshe^{6,7} has advanced an hypothesis based upon clinical, experimental and histological data, concerning the pathogenesis of diphtheritic paralysis. He believes the local paralysis of the palate, usually occurring early, to result from the action of "the toxin elaborated in the membrane, passing up to (the ganglion cells of) the medulla in the perineural lymph channels of the cranial nerves innervating the tonsils and fauces"; a conception similar to that now held regarding tetanus. The general paralysis, polyneuritis and disturbance of accommodation he regards as due to toxin carried in the blood stream to the corresponding ganglion cells. Walshe⁶ states that, "There seems then to be a two-fold mechanism in the production of diphtheritic paralysis in man. There is the initial sometimes severe and relatively short-lived 'local' paralysis, due to the action of the toxin, which has ascended the nerves innervating the local lesion, on the nerve nuclei in the brain stem. Secondly, there is the later, longer lasting 'gen-

eralized' paralysis which is part of the general systemic toxemia."

Although the diphtheria bacillus usually is regarded as an organism that grows in the local lesions at the point of infection and does not penetrate the tissues, there is no doubt however that in some instances varying degrees of dissemination occur. In a few instances positive blood cultures have been obtained in patients *intra vitam*. The blood culture is more frequently positive when the specimen is collected after death. The recorded facts indicate that the number of bacteria in the blood is small and that invasion is probably transient. Bacteriological examination of material collected *post mortem* shows that the diphtheria bacillus, always few in number, has been found in all body organs. Of the organs the spleen is most frequently positive; the liver and kidney less so. A few instances of diphtherial endocarditis have been described. In no case was the toxicity of the organism demonstrated.

Although dissemination probably occurs more frequently than now recognized, there is no doubt that this fact is not of great importance, and that it plays little part in the pathology of diphtheria.

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SPECIAL ARTICLE

DIPHTHERIA DEATHS FOR JULY, 1930

Four deaths from diphtheria from Lake county makes bad news this month. There have been a rather large number of cases reported from there for the past two or three months, and there has been a total of nine deaths for the year so far. It is true that the county is large but even so the rate is going to be far from a compliment for the year 1930. During the past two weeks (August 3 to August 16) there have been no new cases reported, however, and we may hope that the epidemic is under control.

One death each from Allen, Clark, and Lawrence completes the report for the month of July. Each of these counties have been in the black list before, Allen with a total of two; Clark, three, and Lawrence, two. A striking thing is the small number of counties (twenty-nine out of the ninety-two) that have had diphtheria deaths.

(Continued on next page)

Diphtheria deaths for July, 1930:

| County | Total | July | Monroe | | |
|----------|-------|------|------------|----|---|
| Allen | 2 | 1 | Montgomery | 1 | 0 |
| Clark | 3 | 1 | Morgan | 1 | 0 |
| Clinton | 1 | 0 | Perry | 1 | 0 |
| Delaware | 2 | 0 | Randolph | 1 | 0 |
| Dubois | 1 | 0 | St. Joseph | 2 | 0 |
| Elkhart | 2 | 0 | Sullivan | 2 | 0 |
| Greene | 1 | 0 | Tippecanoe | 1 | 0 |
| Howard | 1 | 0 | Tipton | 2 | 0 |
| Jay | 1 | 0 | Vanderburg | 4 | 0 |
| Gibson | 1 | 0 | Vigo | 1 | 0 |
| Knox | 5 | 0 | Warrick | 1 | 0 |
| Lake | 9 | 4 | Wayne | 1 | 0 |
| Laporte | 1 | 0 | White | 1 | 0 |
| Lawrence | 2 | 1 | | | |
| Marion | 9 | 0 | Total | 63 | 7 |

MEDICO-LEGAL DEPARTMENT

BY ALBERT STUMP

ATTORNEY FOR

INDIANA STATE MEDICAL ASSOCIATION

Question: Has a chiropractor the right to use x-ray?

Answer: Those who have any form of limited license to practice medicine will fall into two groups. First, there is the group who obtain their license through their right to the license provided for in the Acts of 1927 to those who, on January 1, 1927, were "residing in the State of Indiana and practicing chiropractic, or any other system or method of healing, taught by the school or college" of which they are graduates. Second, there is the group who obtain licenses upon examination by the State Board of Medical Registration and Examination.

The Act of 1927, being Chapter 248, pages 725 to 728 of the 1927 Acts, which is applicable to this question, reads as follows

"All persons who are now practicing or may hereafter engage in the practice of chiropractic or any other method or system of healing in this state shall be subject in all respects whatsoever to all the provisions of an act entitled, 'An act regulating the practice of medicine, surgery and obstetrics, providing for the issuing of licenses to practice, providing for the appointment of a state board of medical registration and examination and defining their duties, defining certain misdemeanors and providing penalties, and repealing all laws in conflict therewith and certain acts therein specified,' approved March 8, 1897, and all acts amendatory thereof and supplemental thereto, except that applicants for license to practice chiropractic or any other system or method of healing in which drugs are not administered and which does not include surgery or obstetrics shall not be required to take an examination in materia medica, surgery and obstetrics: PROVIDED, That any chiropractor or practitioner of any other system or method of healing, who is a graduate of a school or college teaching the system or method of healing which he practices, and who was on January 1, 1927, residing in the State of Indiana and practicing chiropractic or any other system or method of healing taught by the school or college of which he is a graduate, shall be given without examination and a certificate for a license to practice the system or method of healing in which he has been so engaged."

The proviso of the above quoted part, it will be noted, gives to the practitioner who is a graduate of a school or college, teaching the system or method of which he practices, the right to a license to practice that system. If the chiropractor who was engaged in that practice on January 1, 1927, was, on that date, a graduate of a school which

included within its system or method of healing the use of the x-ray, and if he was using it in his practice at that time he would be entitled to a license under which he could continue to use it. But if the use of the x-ray had not been a part of the system or method taught in the school of which he was a graduate, or if he had not been using the x-ray in his practice on January 1, 1927, then he would have no right, under the license issued, to use the x-ray now.

The "grandfather" clause of the statute requires two prerequisites to lawful practice on the part of those licensed under it, namely: First, he must have been using, on January 1, 1927, in his practice the system he now wishes to use. Second, he must, at the time the 1927 Act became effective, have been a graduate of a school teaching the use of that system or method of healing.

It would require a study of the curriculum of the school from which the practitioner graduated, as well as the facts in regard to the practice in which he was engaged, to determine whether or not he can lawfully use the x-ray at this time if he comes in the first of the two groups above mentioned.

The second group of those who, under the 1927 Act, may be licensed are those who obtain their licenses by examination. They are subject in all respects to the provisions of the Medical Practice Act of 1897 and all amendments and supplements thereto.

While the law does not specifically provide for special limited licenses in which shall be defined the particular system or method of healing the practitioner may employ, it does inferentially authorize the issuing of special limited licenses by the expression "except that applicants for license to practice chiropractic or any other system or method of healing in which drugs are not administered and which does not include surgery or obstetrics shall not be required to take an examination in materia medica, surgery and obstetrics."

But since those who would use "chiropractic or any other method or system of healing" are made subject to the Medical Practice Act, and the law as contained in that act is made applicable thereby to the licensing of them, the Board of Medical Registration and Examination have the right and duty to determine, before an applicant for a license shall be permitted to take an examination, that the college from which he has graduated is a reputable medical college and maintains a standard of medical education conforming to that fixed by the Board itself. The Board has the duty and power to fix the standard of instruction and training that can qualify any practitioner for a license to follow any method of healing as to all subjects except materia medica, surgery, and obstetrics, and as to those subjects, where drugs may be used or surgery or obstetrics practiced. Those who would

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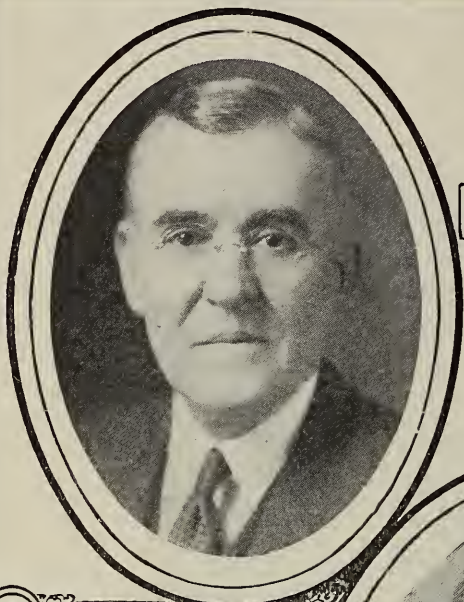


A. C. McDONALD

Warsaw

President Indiana State Medical Association

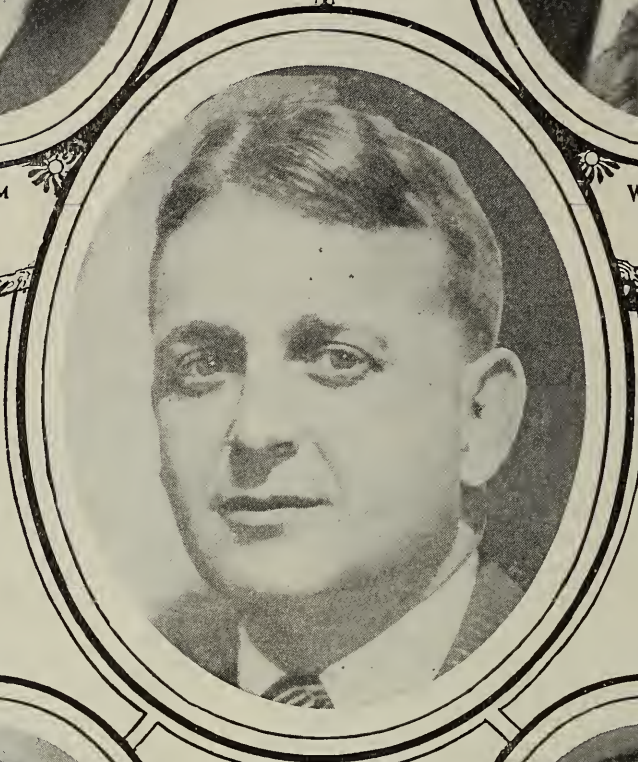
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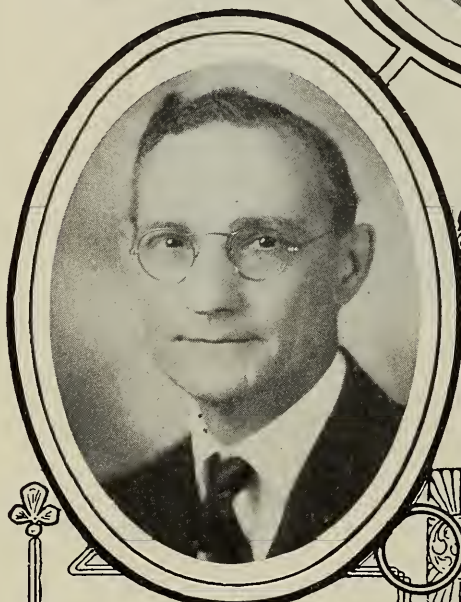
A. B. GRAHAM
PRESIDENT-ELECT
INDIANAPOLIS



WILLIAM DOEPPERS
TREASURER
INDIANAPOLIS



MR. THOMAS A. HENDRICKS,
EXECUTIVE SECRETARY,
INDIANAPOLIS.



H. C. RUDDICK
CHAIRMAN SECTION ON SURGERY
EVANSVILLE



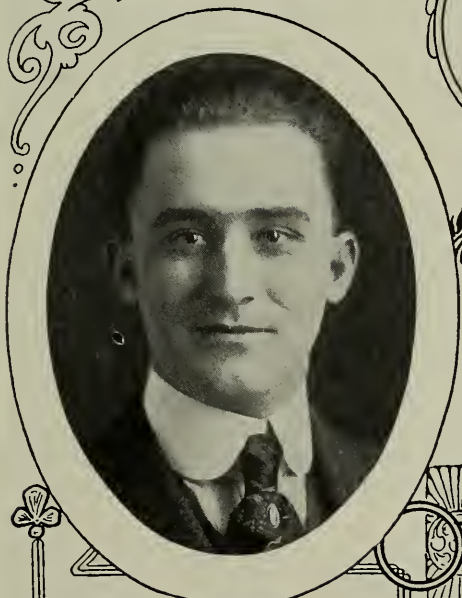
B. D. RAVDIN
CHAIRMAN EYE, EAR, NOSE AND THROAT SECTION
EVANSVILLE



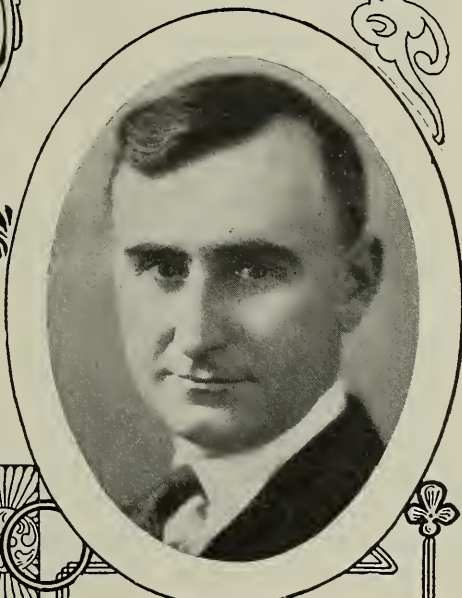
ROBERT M. MOORE
CHAIRMAN SECTION ON MEDICINE
INDIANAPOLIS



GEORGE A. COLLETT
SECRETARY SECTION ON SURGERY
CRAWFORDSVILLE



C. A. ROBISON
SEC. EYE, EAR, NOSE AND THROAT SECTION
FRANKFORT



HARVEY L. MURDOCK
SECRETARY SECTION ON MEDICINE
FORT WAYNE

THE FORT WAYNE SESSION

For the fourth time the Indiana State Medical Association will hold its annual session in Fort Wayne, where it will convene on Wednesday, Thursday and Friday, September 24th, 25th and 26th.

Many changes have taken place since the Association last met in Fort Wayne in 1916. The city, the second largest in Indiana, now has approximately 136,000 population, or an increase of thirty-three percent in the last ten years. Its growth in both population and enterprise makes it conspicuous among the noteworthy cities of the Middle West.

The Fort Wayne Medical Society with over 125 members, headed by Dr. Miles F. Porter, Sr., as chairman of the Committee on Arrangements, and working in conjunction with the convention bureau of the Fort Wayne Chamber of Commerce, extends to Indiana physicians and surgeons, their wives and sweethearts, a most cordial welcome to accept the hospitality awaiting them at the coming session of the Association.

Fort Wayne has earned a reputation as a noted state and national convention center, due to excellent facilities for the handling of large groups of visitors, and because of excellent location and unexcelled accessibility by highway or railway. Here hospitality is a part of the civic code, and the warmth of cordiality and wealth of hospitality that will be offered to the visitors should make the coming session a notable one in a social way, and go far toward creating enthusiasm and interest in the scientific work of the Association.

EARLY HISTORY OF FORT WAYNE

Fort Wayne is the metropolis of northern Indiana and is called the "Summit City" because it occupies the highest of the land in Indiana. Its elevation above sea level is 775 feet. Every school boy is familiar with the fact that Fort Wayne is situated at the junction of the St. Joseph and St. Mary's Rivers, which unite to form the Maumee. He also is familiar with the fact that Fort Wayne is rich in aboriginal tradition and of absorbing historic interest. Long before the foot of a white man had pressed its virgin turf it had existence as Kekionga, the Central City of the once-powerful and warlike Miamis, who held dominion over the region. It was early known to the intrepid French explorers who penetrated the great wild empire of the northwest in the seventeenth century, and there is almost conclusive evi-

dence that the brave and enterprising LaSalle had passed through Kekionga on one of his expeditions to the southwest. The military importance of the place was early recognized by both French and English and each nation at different times in the eighteenth century, prior to the coming of Americans, had built forts and maintained garrisons where now stands Fort Wayne. It was not, however, until 1794 that the Fort Wayne of today had its real beginning. In the fall of that year General Anthony Wayne, after inflicting a crushing defeat upon the hostile Indians at the Battle of Fallen Timbers near Maumee, Ohio, came to Kekionga and on an eminence overlooking the confluence of the St. Mary and St. Joseph

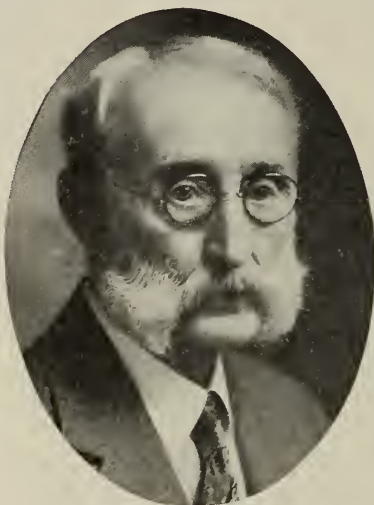
Rivers built up the stockade that was given his name and established the authority of the American government. Fort Wayne remained for a long time a military post and trading point for the Indians and passed through the savage conspiracies and the trials and dangers of the Indian wars incident to the conflict between the United States and Great Britain in 1812, and saw finally the power of the savages in the region broken forever. Then came the period of civic development. About the fort had sprung up a considerable frontier village, and at the close of the war with Great Britain, agricultural settlers began to occupy and cultivate the land. In 1822 Fort Wayne was platted as a village, and in 1829 it was incorporated, and at that

time its population probably was less than 300. In 1840 Fort Wayne, with a population of 2,080, was chartered as a city, and three years later the Wabash and Erie Canal, a great engineering feat in those days, was completed and Fort Wayne's rapid progress to real greatness began in earnest. Early in the '50s opened the epoch of steam railroads, and with them began the industrial development that has made Fort Wayne one of the great railroad manufacturing centers of the old northwest.

FORT WAYNE'S ACHIEVEMENTS

The achievements of Fort Wayne in commerce, manufacture, in education, in religious affairs, in civic progress, public improvement, and all things else that operate to fix her status as a prosperous and pretentious city in a cultured and ambitious community have been notable.

Fort Wayne never has had a "boom," and never has stopped growing. It has no slum district. It is a city of homes, the proportion of home owners



MILES F. PORTER
Chairman Committee on
Arrangements
Fort Wayne

to its population being greater than in any city of its class in the United States.

The city proper covers eighteen square miles of territory, its greatest distance north and south is six miles, and from east to west five miles. Within its corporate limits it has nine miles of rivers, five of the St. Mary's, two of St. Joseph's, and two of the Maumee. All of these river banks within the city are owned by the city and are to be parked and boulevarded. The city owns twenty-nine parks, and boasts of seventy-five churches of all denominations. In industry it has 324 establishments employing over 46,000 workers, paying wages of more than thirty-six million dollars annually, and having products with an estimated value of over two hundred million dollars annually. The principal products are electrical apparatus, trucks, insulated wires, hosiery, tanks and pumps, and radios. It has two daily newspapers with a circulation throughout all of northern Indiana. It is served by four trunk-line railroads and their branches, and by the Indiana Service Corporation with trunk lines going in every direction. Coming in and out of Fort Wayne are twelve hard-surfaced roads, including the Lincoln Highway and the Yellowstone Trail, all of which connect the city with other important cities to the north, south, east and west. For amusement, there are nineteen theaters with a total seating capacity of nearly twenty thousand persons, and one theater under construction is not counted in the list. The largest auditorium seats more than three thousand persons. The parks and playgrounds are equipped with swimming pools, tennis courts, baseball diamonds, football fields and playground apparatus of all kinds. There are three country clubs, an industrial golf course and a municipal golf course, with other municipal courses in contemplation. There are 220 miles of paved streets within the city limits and seventy miles of electric street railway. Fort Wayne is represented in the broadcasting world by two stations, WOWO and WGL, the former being one of the fifteen most powerful stations in the country, and operates on a national cleared channel. It is a member of the Columbia Chain. Fort Wayne has two well-equipped aviation fields, the Paul Baer Field which is the municipal airport, and the Guy Means Airport, which is privately owned.

HOSPITALS

The Hospitals are three in number, well located from a sanitary standpoint, modern in appliances and progressive in type. The oldest institution is the St. Joseph's Hospital, founded in 1869, and recently enlarged so that it occupies an entire block and has a commodious and well-appointed nurses' home in an adjoining block. It represents the latest improvements in hospital construction, is thoroughly up-to-date, and maintains an excellent training school for nurses. The Lutheran Hospital also is a large and

modern hospital, having recently been enlarged greatly and equipped with the very latest improvements known to hospital management. It also maintains an excellent training school for nurses, and a separate home for nurses. The Methodist Hospital is a comparatively new institution, is well-equipped and conducts a school for nurses as well as maintaining a home for nurses. The Irene Byron Sanitarium for tuberculous patients, located six miles from the city, and reached by one of the trunk-line paved roads and the traction lines, is a model of its kind, and occupies an enviable position among modern institutions for the care of the tuberculous. Recently it has been enlarged by the addition of several fire-proof buildings and detached cottages.

PUBLIC AND COMMERCIAL BUILDINGS

Fort Wayne is justly proud of its public and commercial buildings. Many of them are beautiful specimens of architecture. Among these buildings are the many public and parochial schools, Allen County's famed court house, the Scottish Rite Cathedral, the Blue Lodge Masonic building, the Shrine building and adjoining Club House, the Catholic Community Center, the Y. M. C. A., the Y. W. C. A., the First National Bank, the new Lincoln National Bank with its thirty-story tower, the Chamber of Commerce, the Lincoln National Life Insurance Company, and other buildings too numerous to mention.

CLUBS AND RECREATION CENTERS

The Chamber of Commerce, occupying its own building, represents the associated business interests of the city, and it is one of the social clubs of the city. The Elks' Club also is one of the social clubs of the city where hospitality is dealt with a lavish hand, and the club house of the



HOTEL ANTHONY

Headquarters for the Fort Wayne Session

Moose is another place for fraternal and social gatherings. The Scottish Rite Cathedral, the Blue Lodge Masonic building, and the Shrine Club House are constantly open to members of the order and their friends. The Catholic Community Center, the Y. M. C. A. and several industrial



Upper left: Methodist Hospital. Upper right: Wayne Pharmacal Building.
Lower left: Lutheran Hospital. Lower right: St. Joseph's Hospital.



Upper row: Shrine Auditorium, Catholic Community Center and Y. M. C. A.
Lower center: Y. W. C. A.

concerns maintain departments for social and athletic recreation. The Fort Wayne Country Club is an attractive spot about three miles west of the city, easily reached by two concrete paved roads, as also by a line of the Fort Wayne and Northern Indiana Traction Company. The club maintains a splendid eighteen-hole golf course, as well as tennis and hand-ball courts and swimming pool. An attractive club house furnishes refreshments and such other conveniences and accommodations as go with a place of that character. The Orchard Ridge Country Club, four miles from the city, is another attractive spot where an eighteen-hole golf course is maintained, and as much may be said for the Elks' Country Club, located five miles from the city.

FORT WAYNE'S WELCOME

For this year's session of the Indiana State Medical Association Fort Wayne extends a cordial welcome to all of the members of the Association and their friends, and nothing will be left undone which will add to the comfort, pleasure and profit of all who attend. The scientific program is an interesting one, and the Committee on Arrangements has provided social features which will add to the pleasure of the visitors and general success of the session. The ladies especially are invited, and entertainment has been arranged for them while scientific meetings are in session. The Chamber of Commerce, the Elks' Club, the various Masonic buildings, the Catholic Community Center, and the Y. M. C. A. and other clubs will be open to visitors. The hospitals will keep open house for physicians and extend a cordial welcome. The Committee has provided no entertainments, clinics, or junketing trips to interfere with the scientific meetings which are considered of first importance, but those visitors who care to come early or stay over for the purpose of visiting some of the hospitals, large manufacturing establishments, public buildings or other places of interest will be welcome and afforded every facility for carrying out their plans. The hospitals are of particular interest to medical men, and Fort Wayne has reason to be proud of her hospitals and the character and amount of work done in them. As a surgical center Fort Wayne is second only to Indianapolis, and members of the Association who are in the city before or immediately following the session of the Indiana State Medical Association can be assured of witnessing some excellent surgical and medical clinics.

PLACES AND TIME OF MEETINGS

The Anthony Hotel will be the general headquarters of the Association. Here all of the activities of the Association will be carried forward in a satisfactory manner. The registration, the commercial and the scientific exhibits will be on the mezzanine floor. Adjoining the mezzanine floor is a large ball-room which will be used for the general meetings and the meetings of the Section

on Medicine. The main dining room on the ground floor will be used as a meeting place for the Section on Surgery, and an adjoining room will be used for the meeting of the Section on Ophthalmology and Otolaryngology. The House of Delegates and Council also will meet in the ball room off the mezzanine floor.

THE WOMAN'S AUXILIARY

A breakfast business meeting of the Woman's Auxiliary will be held in a special dining room of the Hotel Anthony on Thursday morning. A special program has been prepared.

ENTERTAINMENT

On the morning of the first day, or Wednesday, September 24th, there will be a golf tournament at the Fort Wayne Country Club. Those who do not use their own cars to go to and from the Country Club will find cars furnished for them, and they will leave the Anthony Hotel at 7:00 a. m. The committee in charge of the tournament is as follows: Dr. B. W. Rhamy, general chairman; A. F. Hall, president of the Lincoln National Life Insurance Company, and Dr. J. Matthew Pulliam, trophy committee; the balance of the committee is composed of Drs. E. M. Van-Buskirk, C. O. Work, D. F. Cameron, J. E. McArdle, H. L. Murdock and A. J. Sparks. The golfers will be the guests of the Lincoln National Life Insurance Company from first to last. A golf luncheon will be served at the Country Club by the Lincoln National Life Insurance Company at twelve, noon, and the prizes will be awarded during the luncheon. There will be plenty of prizes, including tournament cups. This latter includes the William H. Armstrong and Company trophy for the low gross, and a permanent cup, and the Lincoln Life Insurance Company trophy for low net. Other prizes have been contributed by Eli Lilly and Company, Meyer Brothers Drug Company, Wayne Pharmacal Company, Patterson-Fletcher Company, Koerber Jewelry Company, Wolf and Dessauer, Hutner Brothers, Fort Wayne Drug Company, and the Main Auto Supply Company. Those desiring to play in the golf tournament will facilitate the work of the committee by sending their club handicaps to Dr. B. W. Rhamy, Wayne Pharmacal Building, Fort Wayne.

The golf prizes are as follows:

Low Gross—Armstrong Cup, Traveling Bag.

Second Low Gross—Desk set.

Third Low Gross—Sweater and socks.

Low Net—Lincoln Life Insurance cup, medicine bag.

Second Low Net—Driver and brassie.

Third Low Net—Sweater and socks.

OTHER PRIZES

Most Birdies—One dozen golf balls.

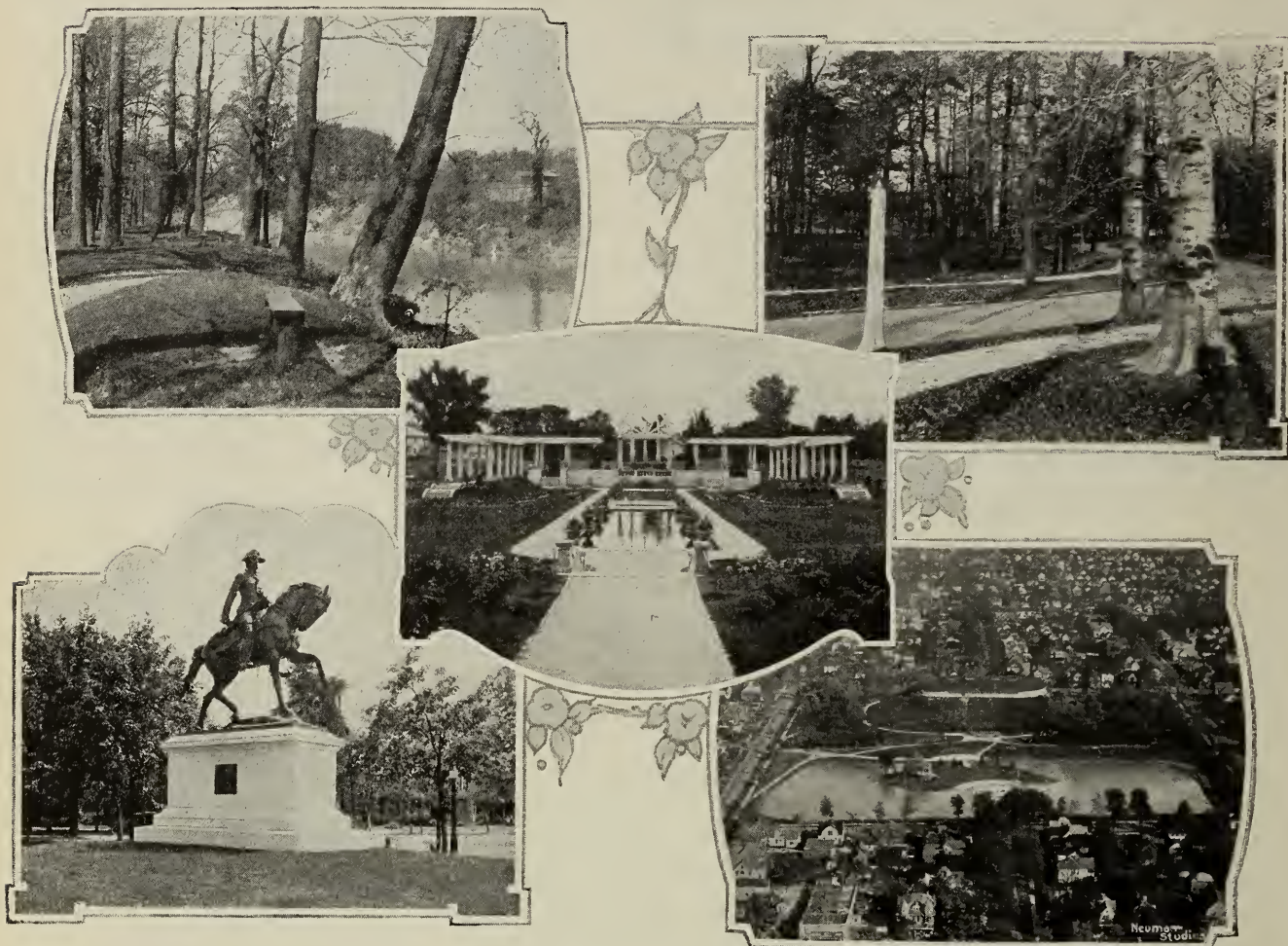
Most Pars—One dozen golf balls.

High Gross—Half dozen golf balls.

Most Balls in Pool—Half dozen golf balls.



Lincoln National Life Insurance Company Building



Views from Fort Wayne Parks



Rose Gardens, Lakeside Park

One of the principal entertainments of the session will be the theater party at the Shrine Auditorium, on Wednesday night, at 8:15. This entertainment is for both members and wives and will consist of a high class vaudeville entertainment by out-of-town talent, furnished by the Shrine Auditorium management.

On Thursday night the members of the Association and their wives will be entertained with a dinner at the Irene Byron Hospital by the management, at 6:00 p. m. Those who do not go in their own automobiles will be furnished automobiles to make the trip to the Irene Byron Hospital, six miles out on one of the main paved roads.

At 8:00 p. m. on Thursday night there will be a meeting at the Shrine Auditorium, open to the public. An address will be given by Dr. Morris Fishbein, editor of *The Journal of the American Medical Association*, editor of *Hygeia*, and author of numerous books, and a talented speaker. There also will be an address by Dr. Arthur J. Cramp, head of the Bureau of Investigation of the American Medical Association and well known public speaker.

The ladies, God bless 'em, will have a program of entertainment that will keep them more than busy from the time they reach Fort Wayne until they leave, and the entertainment will consist of sight-seeing trips, golf, luncheons, teas, musicales, card parties, etc. Detailed information concerning all entertainment will be found in the completed program. Dr. Jessie Carithers Calvin is chairman of the committee on ladies' entertainment.

Theater-goers and lovers of moving pictures will find Fort Wayne well-equipped to cater to their individual tastes. One of the most beautiful moving picture houses of the Middle West is the Emboyd, operated by one of the national amusement syndicates which also operates two other theaters in the city, the Jefferson and the Palace. The Publix Corporation now is ready to open another beautiful movie theater.

The Lincoln National Life Insurance Company, one of the largest life insurance companies of the country, having more than a half billion dollars worth of life insurance in force and admitted assets of more than forty-three million dollars, invites the visitors to inspect its magnificent building, of which Fort Wayne is very proud. As already noted the Lincoln National Life Insurance Company will be the host for the golfers. The company is offering a large cup to be awarded in the golf tournament scheduled for Wednesday morning, and to be played for each year.

REGISTRATION

It is requested that upon arrival at Fort Wayne members of the Association should proceed at once to the registration desk of the Association on the mezzanine floor of the Anthony Hotel. Registration will be by membership cards, and to avoid delays and confusion members are urged to have their cards ready for inspection by the registration clerks. Registering members are requested to indicate the number of ladies in the party so that the committee on entertainment of the visiting ladies may know the number of ladies to be provided for. Badges will be furnished the members for identification. Letters and telegrams may be sent to the Registration Bureau in the Anthony Hotel.

HOTELS

Visitors will find hotel accommodations to suit every taste and purse. Among the leading hotels are the following: Hotel Anthony, headquarters, European plan, table d'Hote meals if desired; Hotel Keenan, Hotel Indiana, Hotel Baltes, Hotel Randall. There are numerous smaller hotels and boarding houses affording good accommodations at reasonable rates. Members are urged to make reservations at the hotels and boarding places in advance and thus avoid the



Broadcasting Station WOWO

delays and confusion incident to assignment after arrival.

RAILROADS

There are nearly one hundred passenger trains in and out of Fort Wayne each day, with hourly service on more than a half dozen interurban lines north, east, south and west, which makes it possible for the members to come and go at their convenience. The city also is reached by numerous state roads, running in every direction from Fort Wayne. Road maps generally may be found at filling stations, or may be procured through the Hoosier State Automobile Association, and the Fort Wayne Motor Club will be pleased to furnish road maps to all those who apply for the same.

DAYLIGHT SAVINGS TIME

Fort Wayne is operating on daylight savings time, and all time given on the program is based on this schedule.

THE PRESIDENT'S MESSAGE

To the Members of the Indiana State Medical Association:

The 1930 annual session of your association will be held in Fort Wayne on September 24, 25 and 26.

The committee on scientific program has arranged a carefully selected list of papers and discussions, which list appears in this issue of THE JOURNAL. I feel that the program will be of interest, and be practical and inspiring.

The Fort Wayne committee has spared no time in making arrangements for the entertainment of members and wives. Doctor Calvin and her assistants have completed their plans for entertaining the wives, and I can speak for their excellent program.

We should remember that a session of our association has an added interest other than a strictly medical gathering. There are to be considered questions concerning general organization of the profession in relation to matters that concern the physician and the general public.

As your president for the year may I not urge a large attendance?

We have done our best, and we hope and look for your approval.

A. C. McDONALD, President.

OFFICIAL CALL TO THE HOUSE OF DELEGATES

The next annual session of the Indiana State Medical Association will be held at Fort Wayne, September 24, 25 and 26, 1930.

The House of Delegates will be constituted as follows: Marion County, nine delegates; Lake County, four delegates; Allen County, three delegates; St. Joseph County, three delegates; Tippe-

canoe County, two delegates; Vanderburgh County, two delegates; Vigo County, two delegates; the other seventy-five county societies, each one delegate; thirteen councilors; the ex-presidents, namely, G. F. Beasley, C. S. Bond, M. F. Porter, W. N. Wishard, J. C. Sexton, G. W. McCaskey, J. B. Berteling, Joseph R. Eastman, W. H. Stemm, C. H. McCully, David Ross, W. R. Davidson, C. H. Good, E. M. Shanklin, Charles N. Combs, Frank W. Cregor, George R. Daniels, and Chas. E. Gillespie. In addition to these, the president, secretary and treasurer, and the editor of THE JOURNAL, all without power to vote except in case of a tie, when the president shall cast the deciding vote.

Blank credentials have been sent by the secretary to each county society, and the properly executed credentials should be mailed to Thomas A. Hendricks, 804 Hume-Mansur Building, Indianapolis, or brought to the session. No delegate will be seated unless wearing the official badge.

The House of Delegates will convene promptly at 5:30 p. m. Wednesday, September 24th, in the main dining room of the Anthony Hotel, and again at 7:00 a. m. Friday morning, September 26th, in the main dining room of the Anthony Hotel (breakfast meeting), unless special action of the House advances the meeting to Thursday evening.

The order of business will be as follows:

1. Call to order by the president.
2. Roll call and seating of qualified delegates.
3. Reading of the minutes of previous meetings.
4. Appointment of reference committees.
5. Report of the executive secretary.
6. Report of the treasurer.
7. Report of the chairman of the council.
8. Report of standing committees.
 - a. Credentials.
 - b. Executive.
 - c. Public Policy and Legislation.
 - d. Bureau of Publicity.
 - e. Medical Education and Hospitals.
 - f. Scientific Work.
 - g. Necrology.
 - h. Industrial and Civic Relationship.
 - i. Delegates to the A. M. A.
 - j. Arrangements.
 - k. Diphtheria.
9. Reading of Communications.
10. Reading of Memorials and Resolutions.
11. Unfinished Business.
12. New Business.
13. Adjournment.

The election of officers will be the first order of business at the second meeting of the House of Delegates. In addition to the regular officers, the terms of the following officers expire December 31, 1930, and their successors must be elected at the session: Delegates to the American Medical Association to succeed Harry Elliott, Brazil, and

David Ross, Indianapolis, and alternates, Robert M. Moore, Indianapolis, and one additional alternate, to be elected for the ensuing two years.

Delegates from the second, fifth, eighth, and eleventh districts are reminded that the terms of their councilors will expire December 31, 1930, and new councilors should be elected to succeed the following:

Second District: G. D. Scott, Sullivan.

Fifth District: O. O. Alexander, Terre Haute.

Eighth District: M. A. Austin, Anderson.

Eleventh District: Ira E. Perry, North Manchester.

Some of these elections may already have been held but should be reported to the House of Delegates at this session for confirmation.

THOMAS A. HENDRICKS,
Executive Secretary.

ANNOUNCEMENTS

All members and those accompanying them are requested to register upon their arrival. The Bureau of Information and Registration will be on the mezzanine floor, Hotel Anthony.

Members of the House of Delegates are reminded that the first meeting will be on Wednesday, September 24th, and will be a dinner meeting in a special dining-room of the Hotel Anthony at 5:30 p. m.

Members of the Council will hold their first meeting in a private dining-room of the Hotel Anthony at 11:00 a. m. (luncheon meeting) on Wednesday, September 24th.

ESSAYISTS will please remember that all papers presented before the Association become the property of the Association and therefore are not to be published or submitted for publication elsewhere than in THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION.

When you register you will be given an official badge. You are requested to wear it, and particularly so when attending or participating in meetings. Members of the House of Delegates will have designating badges. Only accredited delegates are entitled to vote at any meeting of the House of Delegates or even to address the House of Delegates without special permission.

Register early. The booth for registration will be open throughout the session. Please have your pocket cards with you in order to avoid delay in registration. If you have paid your dues to your county secretary *only recently* and have not yet received your membership card, present a receipt from your county secretary and you will be permitted to register. *Please get your badge and wear it.*

Scientific and commercial exhibits will be open on Wednesday and Thursday, on the mezzanine floor, Hotel Anthony.

The class of 1909 of the Indiana University School of Medicine will hold a reunion and luncheon meeting at the Hotel Anthony, September 25th, at 12:30. Dr. Will A. Thompson, of Liberty, Indiana, is chairman for this event.

CONDENSED PROGRAM

(Schedule is made out on
Central Daylight Savings Time.)

Wednesday, September 24, 1930

Morning

- 9 a. m. to 6 p. m., Registration, mezzanine floor, Anthony Hotel.
- 9 a. m. to 6 p. m., Commercial exhibit, mezzanine floor, Anthony Hotel.
- 9 a. m. to 6 p. m., Scientific exhibit, mezzanine floor, Anthony Hotel.
- 7:30 a. m. to 12 m., Annual golf tournament. Eighteen holes, low gross and medal play, Fort Wayne Country Club.
- 11 a. m., Meeting of the Council. Luncheon in private dining-room, Anthony Hotel, room 302, mezzanine floor.
- 12 m., Golf luncheon, grill room Fort Wayne Country Club. Golfers will be guests of the Lincoln Life Insurance Company both for tournament play and the luncheon. Award of prizes.

Afternoon

- 1 p. m. to 5 p. m., General scientific meeting, ballroom, mezzanine floor, Anthony Hotel.
- 3 p. m., Tea for women, Woman's Club, Chamber of Commerce Building.

Evening

- 5:30 p. m., Dinner meeting of House of Delegates, main dining-room, Anthony Hotel.
- 6 p. m., Dinner meeting of women physicians, Woman's Club, Chamber of Commerce Bldg.
- 8:15 p. m., Theater party, Shrine Auditorium.

Thursday, September 25, 1930

Morning

- 8 a. m. to 6 p. m., Registration, mezzanine floor, Anthony Hotel.
- 8 a. m. to 6 p. m., Commercial exhibit, mezzanine floor, Anthony Hotel.
- 8 a. m. to 6 p. m., Scientific exhibit, mezzanine floor, Anthony Hotel.
- 7:30 a. m., Breakfast and annual business meeting of Woman's Auxiliary, private dining-room, adjoining Coffee Shop, Anthony Hotel.
- 8:30 a. m. to 12 m., Meeting of Section on Medicine, ballroom, mezzanine floor, Anthony Hotel.
- 8:30 a. m. to 12 m., Meeting of Section on Surgery, main dining-room, adjoining lobby, Anthony Hotel.
- 8:30 a. m. to 12 m., Meeting of Section on Ophthalmology and Otolaryngology, room on main floor, Anthony Hotel.
- 10:30 a. m., Automobile drive for women to historical and scenic parts of the city, ending at the Fort Wayne Country Club.

Noon

Various fraternity, military and class luncheons and get-togethers in private dining-rooms of various Fort Wayne hotels and clubs.

Afternoon

- 1 p. m., Luncheon for women, Fort Wayne Country Club.
- 2 p. m. to 5 p. m., General scientific meeting, ballroom, mezzanine floor, Anthony Hotel.
- 2:30 p. m., Bridge or golf as desired for women, Fort Wayne Country Club.

Evening

- 6:00 p. m., Complimentary dinner for members of Association at Irene Byron Hospital.

8:15 p. m., Public meeting, Shrine Auditorium. Morris Fishbein, M.D., Editor of *The Journal of the American Medical Association*. Subject: "Food Fads and Follies." Arthur J. Cramp, M.D., director of the Bureau of Investigation of the American Medical Association. Subject: "Patent Medicine and the Public Health."

Friday, September 26, 1930

Morning

7 a. m., Breakfast meeting, House of Delegates, main dining-room, Anthony Hotel.

Meeting of the Council immediately following adjournment of House of Delegates, private dining-room, Anthony Hotel.

Shopping trip for women through retail section.

PROGRAM FOR WOMEN'S ENTERTAINMENT AND WOMAN'S AUXILIARY OF THE INDIANA STATE MEDICAL ASSOCIATION

Wednesday, September 24

3:00 p. m., Tea at Woman's Club.

6:00 p. m., Women physicians' dinner, Woman's Club.

Thursday, September 25

7:30 a. m., Breakfast and annual business meeting of Woman's Auxiliary, private dining-room, adjoining Coffee Shop, Anthony Hotel.

10:30 a. m., Automobile drive to historical and scenic parts of the city ending at Fort Wayne Country Club.

1:00 p. m., Luncheon, Fort Wayne Country Club.

2:30 p. m., Bridge or golf as desired, at Fort Wayne Country Club.

Friday Morning, September 26

Shopping trip through retail section.

Both Wednesday and Thursday evenings the women are invited to join the physicians in the regular program, Wednesday evening at the theater party, and Thursday evening at the lay meeting.

Hospitality Committee will be at headquarters at all times to care for visiting women.

PUBLIC MEETING

Shrine Auditorium, 8:15 P. M.,

Thursday, September 25

Opening Remarks—Miles F. Porter, Sr., M.D., General Chairman, Arrangements Committee.

Introduction of Speakers by C. J. Rothschild, M.D., President, Fort Wayne Medical Society.

"Food Fads and Follies," by MORRIS FISHBEIN, M.D., Editor of the *Journal of the American Medical Association*, and of *Hygeia*.

"Patent Medicine and the Public Health," ARTHUR J. CRAMP, M.D., Director, Bureau of Investigation, American Medical Association. (Lantern slides.)

OFFICIAL PROGRAM OF THE ANNUAL SESSION OF THE INDIANA STATE MEDICAL ASSOCIATION

To Be Held at Fort Wayne, Allen County, Indiana, September 24, 25, 26, 1930

(Schedule is made out on Central Daylight Savings time.)

House of Delegates

First meeting in main dining-room, Anthony Hotel,

Wednesday, September 24, at 5:30 p. m. (Dinner meeting.)

Second meeting, main dining-room, Anthony Hotel, Friday, September 26, at 7:00 a. m. (Breakfast meeting.)

Council

First meeting, private dining-room, room 302, mezzanine floor, Anthony Hotel, Wednesday, September 24, at 11:00 a. m. (Luncheon meeting.)

Second meeting, Friday, September 26, immediately upon adjournment of House of Delegates, private dining-room, Anthony Hotel.

Additional meetings at the call of the chairman of the Council.

General Scientific Meetings

Wednesday, September 24, ballroom, mezzanine floor, Anthony Hotel, from 1:00 to 5:00 p. m.

Thursday, September 25, ballroom, mezzanine floor, Anthony Hotel, from 2:00 to 5:00 p. m.

Section on Medicine

Thursday, September 25, 8:30 a. m., ballroom, mezzanine floor, Anthony Hotel.

Section on Surgery

Thursday, September 25, 8:30 a. m., main dining-room, adjoining lobby, Anthony Hotel.

Section on Ophthalmology and Otolaryngology

Thursday, September 25, 8:30 a. m., room on main floor, Anthony Hotel.

Meeting of Women Physicians

Wednesday, September 24, 6:00 p. m., dinner meeting, Woman's Club, Chamber of Commerce Bldg.

Meeting of Woman's Auxiliary

Thursday, September 25, 7:30 a. m., breakfast and business meeting, private dining-room, adjoining Coffee Shop, Anthony Hotel.

Scientific Exhibits

Wednesday and Thursday, mezzanine floor, Anthony Hotel.

Commercial Exhibits

Wednesday and Thursday, mezzanine floor, Anthony Hotel.

Registration

Wednesday and Thursday, mezzanine floor, Anthony Hotel.

Entertainment

Golf tournament, Fort Wayne Country Club, Wednesday morning, September 24, beginning at 7:30 a. m., with luncheon served at the Club House. Golfers will be guests of the Lincoln Life Insurance Company both for tournament play and the luncheon. Automobiles leave Anthony Hotel at 7:00 a. m. for Fort Wayne Country Club. Transportation available for all golfers not having cars.

Tea for women, Woman's Club, Chamber of Commerce Building, Wednesday, September 24, at 3 p. m.

Theater party for physicians, wives and guests, Shrine Auditorium, Wednesday, September 24, 8:15 p. m.

Automobile drive for women to historical and scenic parts of the city, Thursday morning, September 25, beginning at 10:30 a. m. and ending at the Fort Wayne Country Club.

Luncheon for women, Fort Wayne Country Club, Thursday, September 25, at 1:00 p. m.

Fraternity and class luncheons to be arranged for Thursday noon.

World War Veterans' luncheon, Thursday noon, September 25.

Bridge or golf as desired for women, Fort Wayne Country Club, Thursday, September 25, at 2:30 p. m.

Dinner for physicians, wives and guests at Irene Byron Hospital, Thursday, September 25, at 6:30 p. m., as guests of the hospital.

Public meeting for physicians, wives, guests and public, Shrine Auditorium, Thursday, September 25, at 8:15 p. m. Morris Fishbein, M.D., editor of *Journal of the A. M. A.*, and A. J. Cramp, M.D., director of the Bureau of Investigation of the A. M. A., will be the speakers.

Shopping trip for women through retail section. Friday morning, September 26.

SCIENTIFIC PROGRAM

(Schedule is made out on Central
Daylight Savings time.)

GENERAL SCIENTIFIC MEETING

(Ballroom, Mezzanine Floor, Anthony Hotel)

Wednesday, September 24

- 1:00 p. m., General scientific meeting, ballroom, mezzanine floor, Anthony Hotel. Meeting called to order by A. C. McDonald, M.D., Warsaw, president, Indiana State Medical Association.
- 1:10 p. m., Introduction of William J. Hosey, Mayor of Fort Wayne, by H. O. Bruggeman, M.D., councilor of Twelfth District.
- 1:15 p. m., Address of Welcome—William J. Hosey, Mayor of Fort Wayne.
- 1:25 p. m., President's Address—A. C. McDonald, M.D., Warsaw.
- 2:00 p. m., H. O. MERTZ, M.D., Indianapolis.
Subject: "The Lateral Pyelogram: A Neglected Procedure in Diagnosing Various Abdominal Conditions."

Abstract:—The technique of pyelographing a patient when lying upon the side is presented, and the requirements of a satisfactory lateral pyelogram with the findings of the normal kidney pelvis are discussed. There then follows a review of the various abdominal conditions in which it has been found that the lateral pyelogram has proved of added value in making a differential diagnosis.

The paper is illustrated by lantern slides.

- 2:20 p. m., Discussant: George Kimball, M.D.,
LaPorte.
- 2:25 p. m., WALTER R. PARKER, M.D., Detroit,
Professor of Ophthalmology,
University of Michigan Medical School.
Subject: "Some Eye Conditions in Children of Interest to the General Practitioner."

Abstract:—No attempt will be made to cover all the diseases of childhood that may have ocular manifestations. Only those of more frequent occurrence or of unusual interest will be considered. They may be enumerated as follows: Coordination of the eyes in the new-born, squint, lacrimal obstruction, drooping of the eye lids (ptosis), phlyctenular conjunctivitis, ophthalmia neonatorum, cataracts, headaches, certain forms of blindness, tumors and multiple sclerosis.

- 3:25 p. m., JAMES B. HERRICK, M.D., Chicago,
Emer. Professor of Medicine,
Rush Medical College.
Subject: "The Importance of the History and Physical Examination in Diagnosis."

Abstract:—The tendency among physicians to rely for diagnosis largely upon the laboratory, instruments of pre-

cision and specialists is proper. But in so doing they should not neglect the history and physical examination.

History-taking is an art and is of great importance. Illustrations. Physical diagnosis may detect conditions that are missed by the x-ray or the laboratory. Furthermore, laboratory methods, instruments of precision, examination by specialists, are all subject to error. They are by no means infallible.

All methods should be regarded as mutually helpful, no one method excluding the others. It is to be noted, also, that history-taking and the making of the physical examination keep doctor and patient close together and make possible the personal touch that means so much in the practice of medicine.

4:25 p. m., H. W. GARTON, M.D., Fort Wayne.
Subject: "Compensable Hernia."

Abstract:

- I. Introduction.
- II. Review of representative medical opinion on the nature of hernia formation and its relation to trauma.
- III. Views of representative State Industrial Commissions on compensable hernia: State laws governing adjudication of industrial hernias.
- IV. Method of disposing of hernia cases at Fort Wayne Works; illustrative cases adjudicated by Industrial Board.
Statistics on frequency of hernia found by pre-employment examinations; the "potential hernia"; releases signed by employees; the significance of large external inguinal rings; strangulated hernia occurring in line of duty.

V. Summary and Conclusions.

In conclusion, hernia is one of the industrial problems which has given Industrial Commissions considerable concern and one which still is often unsatisfactorily handled. However, I believe we may draw the following conclusions:

1. Excluding the true traumatic type, hernial development is dependent primarily upon predisposing anatomical conditions of the abdominal wall.
2. A simple act of lifting, straining, slipping, falling, etc., is very rarely, if ever, of sufficient violence to produce a hernia *de novo*.
3. Such acts are frequently the occasion by which the hernia is advanced to the point where it is brought to the attention of the owner.
4. Members of Compensation Boards who hear the evidence (in contested cases) should possess a knowledge of the fundamental nature of hernia, and such knowledge should conform to accepted medical opinion on the subject.
5. It is the consensus of opinion that there are fairly definite criteria for establishing a causal relationship of alleged accident to hernia; these include an analysis of the history of the accident, reporting of the accident within a reasonable period, and the stage of hernial development as shown by physical examination. Equitable deductions can be made only when all of these factors have been correlated properly.

4:45 p. m., Discussant: C. F. Fleming, M.D., Elkhart.

Thursday, September 25

(Ballroom, Mezzanine Floor, Anthony Hotel)

- 2:00 p. m. ROSCOE BEESON, M.D., Muncie.
Subject: "State Medicine."

State medicine is not new. It was conceived in Germany in 1883 and was the result of Bismarck's ideas in regard to governmental insurance. He felt it was necessary because of political reasons. In 1911 Lloyd George of England brought forth the National Health Act, which is better known as the "Panel System." The system in both these countries is similar. Since that time other

countries have adopted certain phases of the Panel System. Last year the Canadian Minister was formulating a bill for state medicine.

We have read about the "Panel System" and we do not take it seriously since it is in other countries. However, if we had to deal with it in our United States we would be more than solemn in our attitude toward it. If we had state medicine in a vicious form it necessarily would have to be patterned more or less after the Panel System. As it now is, we are not to forget that at the present time we have State Medicine in some form in every state in our union.

State Medicine, as it usually is recognized in this country, primarily is not the outgrowth of politics as it was in the old continent, but is the result of changes in medical economics. Politics probably will enter into State Medicine later on or more and more. We all know that in certain respects the status of the medical man is not as admirable as it was twenty, thirty, or forty years ago. Will State Medicine improve this status? No, it will not for the basis of medical practice is the close relationship between the patient and the physician. This is impossible in State Medicine.

Our great problem today is as it was expressed so aptly by Olin West, "The delivery of adequate scientific medical care to all the people, rich and poor, at a cost which can be met reasonably by them."

State Medicine would not arouse so much interest if it were not for the fact that eighty percent of our population are distressed financially to a greater or less extent when bills incident to sickness are incurred. If many of our richly endowed hospitals were no more, and if physicians would become less charitable, this eighty percent would coalesce with the fifteen percent which now are taken care of by the municipal, township, county and state institutions, which are supported by taxation.

The medical profession should give State Medicine much thought. If we do not feel that it would be advantageous we should know it at this time and not allow it to creep in further upon us.

2:20 p. m. Discussant: Chester W. Waggoner, M.D.,
Toledo, Ohio.

2:40 p. m. JACOB A. BARGEN, M.D., Rochester, Minn.
Subject: "The Diagnosis of Malignant Diseases of the Colon and Rectum."

Abstract:—The outstanding diagnostic features of malignant disease of the large intestine include varying degrees of intestinal dysfunction, passage of blood by rectum, and obstruction. Associated weight loss, anemia and pain vary with the portion of the bowel involved and the nature of the tumor.

These features will be discussed; their relation, one to the other evaluated, and the diseases of differential importance described.

(Lantern slides.)

3:10 p. m. FRED W. RANKIN, M.D., Rochester, Minn.
Subject: "The Treatment of Malignant Disease of the Colon and Rectum."

Abstract:—The cooperative management of malignant lesions of the large intestine has been a factor in the increasingly better results obtained in their treatment.

Certain preoperative factors have definite value in the patient's smoother postoperative convalescence and in a reduction in mortality.

Operative procedures vary radically for the various segments of the large intestine. A discussion of these will form the major portion of this discussion.

(Lantern slides.)

3:40 p. m. ISADORE RAPHAEL, M.D., Evansville.
Subject: "Practical Points on Infant Feeding."

Abstract:

Caloric Requirements of Infants
Essential Requirements for Infants' Food
Number of Feedings Needed in 24 Hours
Quantity of Food Needed
Determination of Number of Calories Needed
Determine Amount of Milk Needed
Quantity of Water Needed
Weight Gain
Additions to Diet
Breast-fed Infants
Bottle-fed Infants

Discussant: J. R. Phillips, Michigan City.

4:10 p. m. M. EDWARD DAVIS, M.D., Chicago, Illinois.
Asst. Professor of Obstetrics and Gynecology
at the University of Chicago.

Subject: "The Forceps Operation" (Illustrated by motion pictures).

Abstract:—A description of the indications, conditions, and contra-indications of the operation, and the technique as practiced at the Chicago Lying-in Hospital, illustrated by motion pictures showing all the details of the low forceps operation and forceps operations in occiput posteriors.

SECTION ON MEDICINE

Chairman, Robert M. Moore, Indianapolis.
Secretary, Harvey L. Murdock, Fort Wayne.
(Ballroom, mezzanine floor, Anthony Hotel.)

Thursday, September 25

1. 8:30 a. m., B. L. HARRISON, M.D., Newcastle.
Subject: "Abdominal Manifestations in Diseases of the Chest—Some Clinical Observations."

Abstract:—A short discussion on reflex pain and its relation to chest pathology with abdominal manifestations. The importance of an early differential diagnosis. Case reports will be given and a general summary of diagnostic characteristics of abdominal and chest conditions.

Discussant: Robert G. Moore, M.D., Vincennes.

2. 9:00 a. m., H. H. WHEELER, M.D., Indianapolis.
Subject: "The Ano-Rectal Region and Its Relation to Disease."

Abstract:—A proctoscope should be one of the instruments used in making a diagnosis. An irritable sphincter muscle and spastic colon may cause reflex symptoms and secondary disease. The ano-rectal region as a source of focal infection. Symptoms usually attributed to diseases in the upper abdomen such as gall bladder disease, duodenal, and gastric ulcer are often found to originate in the colon. Hemorrhoids are one of the most frequent diseases; they should be operated by preference, but the injection treatment will give marked relief in a vast number of cases.

Discussant: Stanley McClure Casey, M.D., Huntington.

3. 9:30 a. m., HERMAN M. BAKER, M.D., Evansville.
Subject: "Fusiform Spirochetal Infection as a Cause of Bronchial Asthma."

Abstract:—A series of cases of acute and chronic bronchial asthma are reported in which it was demonstrated that fusiform spirochetal infection was present and in which after the eradication of the fusiform spirochetal infection the asthmatic symptoms were relieved. Lantern slides of micro-photographs are shown of smears containing the organisms, and x-rays of the lungs and sinuses in certain of the cases are shown. There will be a very brief discussion of allergy in general and a brief review of the literature of fusiform spirochetal infection. So far as a careful review of the entire literature goes, there are only five cases reported of asthma due to this cause. There

are other cases reported in which fusiform spirochetal infection was noted along with asthma, but was considered as a coincident rather than possible cause.

Discussant: Harold Ottis Williams, M.D., Kendallville.

4. 10:00 a. m., ROBERT V. HOFFMAN, M.D., South Bend.
Subject: "In Behalf of Private Practice."

Abstract:—Popular claims by public health officials, sociologists and philanthropists. Need and manner of meeting challenge of state medicine. Mental hygiene, a salient ripe for attack. Heredity *versus* environment—parent and teacher responsibilities. Wanted—national sportsmanship. The business of marriage. Psychiatry in the courts. Role of the general practitioner.

Discussant: Chas. A. Sellers, M.D., Hartford City.

5. 10:30 a. m., MAURICE JOS. BARRY, M.D., Indianapolis
Subject: "The Nature and Treatment of Massive Collapse of the Lung."

Abstract:—Definition. Historical. Occurs in a variety of clinical conditions, both surgical and medical. Clinical picture. Physical signs. Roentgen diagnosis. Etiological hypotheses. Coryllos and Birnbaum experimentally demonstrate the one essential cause is bronchial obstruction. Relation of atelectasis to pneumonia.

Work of Henderson and Haggard on physiology of respiration and the introduction of carbon dioxide inhalation in treatment of various types of asphyxia. Hyperventilation with CO₂ as a routine method of preventing postoperative pulmonary complications.

Treatment. Bronchoscopic aspiration. Rolling method of Sante. Inhalation of oxygen plus five-percent CO₂.

Treatment of medical pneumonia with oxygen plus five-percent CO₂.

Discussant: Russell W. Lavengood, M.D., Marion.

6. 11:00 a. m., JAMES H. STYGALL, M.D., Indianapolis.
Subject: "The Diagnosis and Treatment of Non-tuberculous Suppurative Lung Lesions."

Abstract:—Bronchiectasis, lung abscess and empyema with bronchial fistula are discussed. The literature is reviewed and a number of different types of cases are shown with slides.

Discussant: J. O. Parramore, M.D., Crown Point.

7. 11:30 a. m., Election of Section Officers for 1931.

SECTION ON SURGERY

Chairman, H. C. Ruddick, Evansville.

Secretary, George A. Collett, Crawfordsville.

(Main Dining-room, adjoining lobby, Anthony Hotel.)

Thursday, September 25

1. 8:30 a. m., CLEON A. NAFE, M.D., Indianapolis.
Subject: "Post-operative Complications of Abdominal Operations and Their Treatment."

Abstract:—Post-operative complications are in a large majority of cases responsible for the morbidity and mortality that follow elective abdominal operations. These complications often arise in patients who are operated upon in good general health and presumed to be good operative risks and are the cause of considerable unsatisfactory results to the patient and unhappiness to the surgeon.

Wound infection, deep abscess, hemorrhage, wound separation, hiccoughs, vomiting, acute gastric dilatation, bowel obstruction, pneumonia and pulmonary atelectasis are some of the serious and troublesome post-operative complications which must be kept in mind always. Everything should be done to prevent them and when they do occur they should be recognized as early as possible and

proper measures instituted to combat their evil effects.

Discussant: Milton E. Leckrone, M.D., Rochester.

2. 9:00 a. m., WALTER H. BAKER, M.D., South Bend.
Subject: "Common Surgical Tumors in the Colon."

Abstract:—It is too large a subject to cover in a paper that it has taken many volumes to describe. The most common variety of tumor is cancer. Tuberculosis, inflammatory, benign and tumors from specific infections come a distinct second. Too much importance cannot be placed upon a good hospital study and examination of these cases. The symptoms vary to a great extent. X-ray of the colon is often very indefinite in tumors of the colon. Prognosis in these cases is much better than malignant growths, if the operative mortality can be overcome, than in malignant growths in other places of the abdominal organs, excepting of the fundus of the uterus. Operative methods on the colon and rectum have improved. The mortality rate has much improved since surgeons have relied upon the multiple stage methods.

Report of my limited number of forty-one post-operative cases.

Discussant: W. D. Gatch, M.D., Indianapolis.

3. 9:30 a. m., A. C. ARNETT, M.D., Lafayette.
Subject: "Anæsthesia—The Surgeon's Viewpoint."

No abstract received.

4. 10:00 a. m., FLOYD ROMBERGER, M.D., Lafayette.
Subject: "Surgery—The Anæsthetist's Viewpoint."

Abstract:—Surgical anæsthesia, surgical judgment and surgical asepsis are the stones which form the arch of the gateway through which pass our surgical patients—for better or for worse. There is no such thing as an irreducible minimum in surgical mortality and morbidity. Projecting oneself into the future, ten, fifteen, and twenty years, it readily can be seen that two great advances toward the reduction of surgical mortality can be obtained. First, our State University could organize a separate and distinct department of anæsthesia, headed by a teacher or director of experience, judgment, and courage, and backed by a research department of unquestioned prestige. Second, our state laws of licensure could be amended, so that he who essays major surgery may do so only after proper certification from such board, which will grant such permission only to those who have had proper training and experience, and who show evidence of real surgical judgment.

Discussants: T. M. Jones, M.D., Anderson.
Marie Kast, M.D., Indianapolis.

5. 10:30 a. m., R. A. MILLIKEN, M.D., Indianapolis.
Subject: "The Conservative Treatment of Bone and Joint Tuberculosis: An End Result Study."

Abstract:—Out of two hundred and four cases of bone tuberculosis treated at the Long Hospital since 1914, information was obtained about one hundred and ten. Of this number forty-five percent are dead, and only one case is living without some form of disability. The study supports the thesis that skeletal tuberculosis does not heal with motion, and emphasizes the failure of the external fixation methods to produce cures.

Discussant: E. Vernon Hahn, M.D., Indianapolis.

6. 11:00 a. m. E. B. MUMFORD, M.D., Indianapolis.
Subject: "Joint Surgery."

Abstract:—Joint histology, reaction of synovia to trauma, infection and toxins. Importance of aspiration of joints. Surgical approach to joints. Treatment of purulent arthritis. Arthroplasty. Resection of joints. Arthrodesia.

Discussant: L. L. Shuler, M.D., Indianapolis.

7. 11:30 a. m. Election of Section Officers for 1931.

SECTION ON OPHTHALMOLOGY AND OTOLARYNGOLOGY

Chairman, B. D. Ravdin, Evansville.

Secretary, C. A. Robison, Frankfort.

(Room on Main Floor, Anthony Hotel.)

Thursday, September 25

1. 8:30 a. m. CARL B. SPUTH, M.D., Indianapolis.

Subject: "Zinc Ionization in Treatment of Rhinitis and Sinusitis."

Abstract:—Pathology, symptoms and diagnosis will be discussed. Technique of ionization and treatment outlined. Indications and contra-indications. Case reports.

Discussant: C. H. McCaskey, M.D., Indianapolis.

2. 9:00 a. m. EDWARD A. PAPE, M.D., Indianapolis.

Subject: "Treatment of Cataract Cases by Lens Extract."

Abstract:—A statistical report on the use of lens antigen in the treatment of cataracts. Its early use and results obtained by Dr. A. E. Davis. Method of use and results expected. Contra-indications to treatment. My own personal experience with lens antigen and report of cases. What to expect from the treatment of cataracts. Early diagnosis and thorough physical examination. Treatment of the patient other than the cataracts. Dosage, number and intervals, with other medication. Symptoms following over-dosage. Classification of cataracts best suited for this form of treatment. Cataract surgery following lens antigen treatment. The final results of treatments shown by my own statistics. A complete report of treatment and results of a few cases representing a different classification of cataracts.

Discussant: B. W. Egan, M.D., Logansport.

3. 9:30 a. m. F. J. SPILMAN, M.D., Connersville.

Subject: "Some Reasons Why the Dentists and the Otolaryngologists Should Become Better Acquainted."

Abstracts:—In the treatment of maxillary sinus disease the rhinologist often fails to consider the possibility of tooth pathology as a causative factor. Every case of antrum disease should have a thorough mouth examination by a competent dentist. The examination of the oral cavity by the dentist should include radiograms, transillumination and vitality testing both thermal and electrical.

Discussant: J. D. McKay, M.D., Marion.

4. 10:00 a. m. CHARLES J. ADAMS, M.D., Kokomo.

Subject: "Practical Refraction."

Abstract:—What does practical refraction mean to each ophthalmologist? Obviously the correction of optical errors with proper fitting glasses. But this simple statement does not describe adequately its meaning. There are many things which appear to be of minor importance when you are in school getting the theory but which become of major importance when you are out on your own to be considered. The application of the theories and the methods you have been taught, sales psychology, and last but not least competition become of paramount interest to those of us who are attempting to earn a living by practicing this art. How valuable and how accurate are our theories and methods, and how much importance must we place upon each one and how dependable is each one? What about sales psychology? How must I meet and adjust myself to my competition?

Discussant: E. M. Shanklin, M.D., Hammond.

5. 10:30 a. m. H. A. VANOSDOL, M.D., Indianapolis.

Subject: "The Systemic Effect of Nasal Hyperplasia as It Affects the Nasal Ganglion."

Abstract:—A careful history of a case should be taken to insure one that he is not treating a grave condition lightly, and that the anatomical location of the sphenopalatine ganglion is such that injury from a diseased mucous membrane or sinus may in turn react on the autonomic nervous system to impair the general health

of a patient. The physiology of endocrine glands must be considered in the treatment of the systemic effect of nasal hyperplasia.

Discussant: M. G. Erehart, M.D., Huntington.

6. 11:00 a. m. ORRIS T. ALLEN, M.D., Terre Haute.

Subject: "Some Referred and Reflexed Eye Disturbances."

Abstract:—Distinction between referred and reflex disturbances. Trigeminal nerve, ethmoiditis, acute and chronic teeth-pressure symptoms. Those due to pathology.

Discussant: Byron N. Lingeman, M.D., Crawfordsville.

7. 11:30 a. m. WM. S. TOMLIN, M.D., Indianapolis.

Subject: "Nasal Obstruction."

Abstract:—This condition is discussed as related to children and adults, and has particular consideration of the causative diagnosis, with references to immediate and remote effects and some suggestions as regards proper procedures for relief. Headings are made of developmental, traumatic and inflammatory types, the last including foreign bodies and benign and malignant growths.

Discussant: H. E. Allen, M.D., Richmond.

8. 11:55 a. m. Election of Section Officers for 1931.

SCIENTIFIC EXHIBIT

Ernest Rupel, M.D., Indianapolis,

Director of Scientific Exhibit.

Mezzanine Floor, Anthony Hotel.

- I. Central State Hospital, Indianapolis. (Room 310.)

1. Neurosyphilis and Malaria Treatment of General Paresis.

Max A. Bahr, M.D., Indianapolis,

W. L. Druetsch, M.D., Indianapolis, and American Social Hygiene Association, Wm.

F. Snow, M.D., and Walter Clarke, M.D., New York.

2. Motion picture exhibit entitled:

A motion picture film illustrating the pathology of syphilis of the central nervous system, and also the symptomatology of the various typical forms of neurosyphilis.

- II. Motion pictures (Room 312). Machine operated by courtesy of Raymond Bright, State Board of Health.

A continuous program of motion picture films will be shown in this room by the following exhibitors. This feature of the scientific exhibit is especially called to the attention of those who attend the Fort Wayne session.

Wednesday
Sept. 24

9:00 a. m. Albert E. Sterne, M.D.

"Mental and Nervous Diseases."

10:00 a. m. Indiana University School of Medicine.

"Cisternal Puncture."

L. H. Gilman, M.D.

11:00 a. m. Central State Hospital

A motion picture film illustrating the pathology of syphilis of the central nervous system, and also the symptomatology of the various typical forms of neurosyphilis.

2:00 p. m. Riley Hospital

3:00 p. m. State Board of Health

4:00 p. m. Indiana Division of the Child Hygiene Department

- III. Methodist Hospital of Indianapolis (Room 316)
Facilities of the Modern Hospital as an Aid to Diagnosis.

- IV. "Mental and Nervous Diseases" (Room 318),
Albert E. Sterne, M.D.

- V. Indiana University School of Medicine (E. T. Thompson, M.D., Administrator, Indiana University Hospitals).

Thursday
Sept. 25

4:00 p. m.

3:00 p. m.

2:00 p. m.

11:00 a. m.

10:00 a. m.

9:00 a. m.

1. Department of Bacteriology, Thurman B. Rice, M.D. (Room 320).
2. Department of Surgical Pathology (Room 322).
3. Department of Biochemistry and Pharmacology, R. N. Harger, Ph.D. (Room 324).

VI. Riley Hospital

Display of the Department of Orthopedic Surgery (Room 326).

VII. State Board of Health (Room 328).

General exhibit, Raymond Bright.

VIII. Indiana Division of the Child Hygiene Department (Room 330). Ada Schweitzer, M.D.

COMMITTEE CHAIRMEN FOR FORT WAYNE SESSION

General Arrangements: Miles F. Porter, Sr., M.D.

Finance: L. P. Harshman, M.D.

Entertainment: A. E. Bulson, M.D.

Publicity: A. E. Bulson, M.D.

Hotels and Public Meeting: H. O. Bruggeman, M.D.

Class Reunions and Fraternity Get-togethers: L. P. Harshman, M.D.

Golf: B. W. Rhamy, M.D. (general chairman), A. F. Hall, M.D., and J. M. Pulliam (trophy committee), E. M. VanBuskirk, C. O'Rourke, D. F. Cameron, J. E. McArdle, H. L. Murdock, A. J. Sparks.

Military Service: L. T. Rawles, M.D.

General Entertainment Committee for Women: Dr. Jessie C. Calvin (general chairman), Mrs. Bud VanSweringen, Mrs. L. P. Harshman, Mrs. C. J. Rothschild, Mrs. A. E. Bulson, Mrs. Edgar Mendenhall, Mrs. Ben Perley Weaver, Mrs. W. O. McBride, Mrs. M. R. Lohman.

Golf for Women: Mrs. Albert E. Bulson.

Lanterns: A. O. Truelove, M.D.

Reception: D. F. Cameron, M.D.

Automobile: J. Ray Schomp.

REPORT OF COMMITTEE ON CREDENTIALS

House of Delegates, Indiana State Medical Association:

Gentlemen:—Your Committee on Credentials recommends that every duly elected delegate come to the state session at Fort Wayne in September with the properly signed credentials, as the House of Delegates will be a very busy body. By doing this it will help the committee and give the house more time for more important business. In the past few years we have had very little trouble in seating the delegates and we want the same thing this year. No one will be seated without the proper credentials.

GEO. D. MILLER, Chairman,
IRA D. PERRY,
J. A. WORK.

REPORT OF EXECUTIVE SECRETARY

House of Delegates, Indiana State Medical Association:

Gentlemen:—Any disposition that anyone might have to label 1930 as "just another year" so far as medical association matters are concerned will be changed if the time is taken to read the various reports of committees and officers of the State Association contained in the following pages. In fact, so detailed and complete are these reports that your executive secretary finds himself at a loss to add anything beyond expressing sincere thanks to every member of the Association for the backing which is given scientific medical organization work in Indiana. Undoubtedly progress has been made and the increasing influence of the State Association, working through its various committees, may be seen in the following:

1. The decline of chiropractic and the cults in general throughout the state.
2. The enlightening survey of the Committee on the

Cost of Medical Care in Shelby County. (See Executive Committee Report for details.)

3. The increasing activities of the Bureau of Publicity and genuinely fine response received from the press and the public.
4. The fearless work of the Better Business Bureaus throughout the state in bringing such unscientific commercial ventures as "The Tricho System" to the attention of the public.
5. The effective work of the National Food Bureau in chasing to cover food faddists such as McCoy and Sampson and other fanatical critics of the medical profession.
6. The generally high standard of scientific work done by the profession throughout the state.
7. The increasing spirit of harmony on the part of physicians as is shown by renewed activities and cooperation in several county societies of the state which formerly had been handicapped by factions.

Much remains to be done but a start has been made, and the headquarters office of the State Association is ever willing to be of service whenever possible, not only to the county medical societies but to the individual physicians of the state, whenever called upon.

THOMAS A. HENDRICKS,
Executive Secretary.

REPORT OF TREASURER

House of Delegates, Indiana State Medical Association:

Gentlemen:—The following is a statement from the Treasurer of the Indiana State Medical Association showing comparative statements of the application of funds for the period from January 1st to August 1st for the years of 1929 and 1930, and constitute the report of the treasury for this year.

The books in this office have been audited by the firm, Hayes & Whitaker, certified public accountants, and their report is herewith attached.

August 22, 1930.

Indiana State Medical Association,
804 Hume-Mansur Building,
Indianapolis, Indiana.

Gentlemen:

According to your instructions we have made an audit of your records for the period beginning January 1, 1930, and ending August 1, 1930, and submit herewith our report.

We verified the Certificates of Deposit, Liberty Bonds and Real Estate Bonds in the Safety Deposit Box at the Meyer Kiser Bank and find that they agree with the accounts as shown by the records.

The Meyer Kiser Bank Account is out of balance in the amount of Fourteen Dollars (\$14.00) on account of a check drawn on the Jay County Savings and Trust Company being returned. This check was returned because of the closing of the above named bank. The adjusting entry has not been made as the committee is endeavoring to have the check made good.

We hereby certify that the information contained in this report was taken from the records of the association and subject to the foregoing comment in our opinion correctly reflects the results of operation and financial condition of the association for the period specified.

HAYES & WHITAKER,
By T. W. Whitaker.

Statement of Application of Funds
January 1st to August 1st, 1930

| INCOME | |
|--|-------------|
| Membership Dues..... | \$18,879.00 |
| Interest on Liberty Bonds..... | 106.25 |
| Interest on Real Estate Bonds..... | 180.00 |
| Interest on Certificates of Deposit..... | 742.50 |
| Interest on Checking Accounts..... | 144.50 |
| Income from Exhibits..... | 1,082.50 |
| TOTAL RECEIPTS..... | \$21,134.75 |

| EXPENDITURES | |
|---|-------------|
| Executive Secretary's Office..... | \$ 6,580.84 |
| Publicity Committee..... | 255.48 |
| Public Policy..... | |
| JOURNAL..... | 5,394.00 |
| Council..... | 149.39 |
| Treasurer..... | 59.00 |
| Annual Session..... | 308.52 |
| Miscellaneous Committees..... | 1,141.70 |
| Attorneys' Fees..... | 233.31 |
| Medical Defense..... | 50.00 |
| TOTAL EXPENDITURES..... | \$14,172.24 |
| Net Income to August..... | \$ 6,962.51 |
| Checking Account Balance January 1st..... | 25.87 |
| TOTAL..... | \$ 6,988.38 |
| Less Check to Petty Cash for 1929 Expenditures..... | 188.85 |
| BALANCE CHECKING ACCOUNT August 1st..... | \$ 6,799.53 |

Comparative Statement of Surplus Account
At August 1st for the Years 1929 and 1930

| STATEMENT OF SURPLUS ACCOUNT | | | |
|-------------------------------|-------------|-------------|-----------------------------|
| | 1929 | 1930 | Increase or Decrease* |
| Surplus January 1st..... | \$26,181.94 | \$28,037.02 | \$1,855.08 |
| Net Income to August 1st..... | 6,342.45 | 6,962.51 | 620.06 |
| Surplus August 1st..... | \$32,524.39 | \$34,999.53 | \$2,475.14 |
| ANALYSIS OF SURPLUS ACCOUNT | | | |
| Certificate of Deposit— | | | |
| Meyer Kiser Bank..... | \$20,000.00 | \$18,000.00 | (\$2,000.00) |
| Liberty Bonds..... | 5,000.00 | 5,000.00 | |
| Real Estate Bonds..... | 5,000.00 | 5,000.00 | |
| Checking Account, | | | |
| Meyer Kiser Bank..... | 2,324.39 | 6,799.53 | 4,475.14 |
| Checking Account, | | | |
| Bankers Trust Co..... | 200.00 | 200.00 | |
| TOTALS..... | \$32,524.39 | \$34,999.53 | \$2,475.14 |

*Parentheses () denote decrease.

Comparative Statement of Application of Funds
January 1st to August 1st, Years 1929 and 1930

| INCOME | | | |
|-------------------------------------|-------------|-------------|----------------------------|
| | 1929 | 1930 | Increase or Decrease |
| Membership Fees..... | \$18,830.00 | \$18,879.00 | \$ 49.00 |
| Interest on Liberty Bonds..... | 106.25 | 106.25 | |
| Interest on Real Estate Bonds..... | | 180.00 | 180.00 |
| Interest on Certificates of | | | |
| Deposit and Checking Account..... | 968.72 | 887.00 | (81.72) |
| Income from Exhibits..... | | 1,082.50 | 1,082.50 |
| TOTAL RECEIPTS..... | \$19,904.97 | \$21,134.75 | \$1,229.78 |
| EXPENDITURES | | | |
| Executive Secretary's Office..... | \$ 5,995.77 | \$ 6,580.84 | \$ 585.07 |
| Publicity Committee..... | 270.97 | 255.48 | (15.49) |
| Public Policy..... | 383.71 | | (383.71) |
| JOURNAL..... | 5,386.00 | 5,394.00 | 8.00 |
| Council..... | 177.63 | 149.39 | (28.24) |
| Treasurer..... | 436.50 | 59.00 | (377.50) |
| Annual Session..... | 86.40 | 308.52 | 222.12 |
| Miscellaneous Committees..... | 151.57 | 1,141.70 | 990.13 |
| Attorney Fees..... | 175.00 | 233.31 | 58.31 |
| Medical Defense Fund..... | 498.97 | 50.00 | (448.97) |
| TOTAL EXPENDITURES..... | \$13,562.52 | \$14,172.24 | \$ 609.72 |
| NET INCOME TO AUGUST 1ST..... | 6,342.45 | 6,962.51 | 620.06 |
| Checking Account Bal. Jan. 1st..... | 981.94 | 25.87 | (956.07) |
| Less Amount Transferred to | | | |
| Real Estate Bonds..... | (5,000.00) | | 5,000.00 |
| To Petty Cash for 1929 Exp..... | | (188.85) | (188.85) |
| CHECKING ACCT. BAL. Aug. 1st..... | \$ 2,324.39 | \$ 6,799.53 | \$4,475.14 |

Report of Petty Cash Fund, August 1, 1930

| RECEIPTS | |
|-------------------------------------|------------|
| Balance August 1, 1929..... | \$ 200.00 |
| Checks Received from Treasurer..... | 2,030.45 |
| TOTAL RECEIPTS..... | \$2,230.45 |

| EXPENDITURES | |
|------------------------------------|------------|
| Executive Committee..... | \$ 512.08 |
| Publicity Committee..... | 327.27 |
| Council..... | 3.22 |
| Annual Session..... | 65.98 |
| Other Committees..... | 1,121.90 |
| TOTAL EXPENSES..... | 2,030.45 |
| BALANCE AUGUST 1, 1930..... | \$ 200.00 |
| Bank Reconciliation August 1, 1930 | |
| BALANCE PER BANK STATEMENT..... | \$6,845.01 |
| Plus Deposits not on Statement: | |
| August 1..... | \$137.50 |
| August 1..... | 21.00 |
| | 158.50 |
| TOTAL..... | \$7,003.51 |
| Less Checks Outstanding: | |
| No. 800..... | \$ 33.33 |
| No. 802..... | 46.00 |
| No. 803..... | 80.00 |
| No. 804..... | 16.00 |
| No. 805..... | 42.65 |

| | |
|-------------------------------|------------|
| Total Checks Outstanding..... | 217.98 |
| BALANCE..... | \$6,785.53 |
| Plus Checks Taken Up..... | 14.00 |
| BALANCE..... | \$6,799.53 |

Respectfully submitted,
WILLIAM A. DÖEPPERS, Treasurer.

REPORT OF THE CHAIRMAN OF THE
COUNCIL

House of Delegates, Indiana State Medical Association:
Gentlemen:—Due to the fact that the October, 1929, and the January, 1930, numbers of THE JOURNAL carry in detail the minutes of the Council, the chairman of this body wishes here to give only a short outline of the principal acts of the Council during the past year.

First Meeting, Evansville, September 25, 1929

The Council convened at the Hotel McCurdy, Evansville, Indiana, the roll call showing ten of the thirteen councilors present, along with the president and the editor of THE JOURNAL. As each councilor had made a formal report on the condition of his own district in the annual convention number of THE JOURNAL, and as there were no additions or corrections to these reports, they stood as originally printed. Without exception they showed an active and healthy condition in each district.

With regret the Council received the resignation of Dr. E. E. Evans, of Gary, as chairman, the present chairman being elected to fill the unexpired term of Doctor Evans, which ran to January 1, 1930. It was also with regret that the Council received the resignation of Dr. J. H. Weinstein, of Terre Haute, who had been in continuous service as councilor of the Fifth District for twenty-four years except for interruption of the World War.

Dr. M. A. Austin, councilor for the Eighth District, complained against the Riley Hospital bulletins. This matter was referred to the Executive Committee and was set for discussion at the midwinter meeting of the Council. Doctor Austin claimed that two-thirds of the patients who go from his county to the Riley Hospital are not indigent and should not be sent there. Doctor Scott reported that there was an understanding in his county that before a doctor signed any commitment papers to the Riley Hospital the matter should be brought before the county medical society except in emergency cases. Doctor Graessle said, "Someone is creating an impression

among the laity that everyone is entitled to get free service at the Riley Hospital, and that better service can be had there than any place else in the state."

The report upon technical exhibits showed that there were twenty-six exhibitors, including *Hygeia*. The scientific exhibit was an added feature to the 1929 program.

The Council voted that \$1,000 be budgeted for paying expenses of secretaries to the annual secretaries' conference at Chicago.

Second Meeting, Evansville, September 27, 1929

Ten councilors of the thirteen districts were present, along with the president of the Association.

All matters of business were tabled until midwinter meeting.

Midwinter Meeting, Indianapolis, Dec. 19, 1929

Ten members of the Council, along with the retiring president, the president-elect for 1930, the president-elect for 1931, the treasurer of the Association, the attorney for the Association, and the executive secretary, were present.

Informal reports of councilors showed every district in good condition. All districts hold a regular annual meeting except the Eighth, and the councilor of the Eighth District said that a multiplicity of county meetings was held in his district; hence no district meeting had been held during the last few years. On the other hand the councilor of the Third District reported that, although county society meetings in his district were not well attended, the district meetings were always conspicuous for their fine programs and big attendance.

The reports of officers received, the treasurer speaking of the fine financial condition of the Association, which on December 31, 1929, had a surplus of \$28,037.02.

Dr. B. D. Myers, dean of the Indiana University School of Medicine at Bloomington, appeared upon invitation of the Council and read a report in regard to the complaint against the Riley Hospital bulletins. Doctor Myers spoke of the fact that the Riley Hospital Committee desired to cooperate in every way possible with the Indiana State Medical Association, and it was his judgment that cooperation could be obtained upon the basis of the following three points:

1. Reporting back to doctors who have committed a patient when the patient is discharged.
2. Continuance of the medical bulletin, not of the "sob story" type, but reports of general interest, written by a doctor of medicine for doctors of medicine, and as such none the less interesting to the public.
3. By sending the University nurses into the counties on invitation of the county medical societies.

The preliminary report upon arrangements and accommodations for the annual session at Fort Wayne received by the Council.

The reports of the chairmen of the various standing committees received.

Illegality of Action Giving State Board of Health Representation in the House of Delegates: The Council went on record suggesting that Albert Stump, attorney for the Association, draw up the proper amendment to the Constitution in necessary form and make sure that it is presented by Doctor Bulson at the next meeting of the House of Delegates.

Dr. David Ross and Dr. William H. Kennedy were elected unanimously as members of the Executive Committee for 1930.

Dr. E. E. Padgett, of Indianapolis, temporary chairman of the Council, was elected permanent chairman of the Council for 1930.

Respectfully submitted,

E. E. PADGETT,
Chairman of the Council.

REPORT OF COUNCILOR DISTRICTS

First Councilor District

The First District Society met only once in 1929. On December 10 they met with the Vanderburgh County Society and elected officers for the year 1930. The scientific program was in charge of Dr. Pierce McKenzie, of Evansville, and the attendance was unusually good.

Each county society is organized and more or less active. Professional affairs in general are excellent throughout the district. The councilor has had calls for program material from some of the smaller counties but has received no complaints as to the organization work. On the whole, organized medicine in the First District is in good condition.

JOHN H. HARE, Councilor.

Second Councilor District

There is nothing very unusual to report about the medical fraternity of the Second Councilor District for this year.

The societies of each county have monthly meetings except during the hot summer months.

Martin-Daviess counties have good meetings, which are well attended.

Greene county has regular meetings and very good programs.

Owen county has very few physicians in the county, but have good meetings considering the number of members.

Knox county holds meetings during the winter months, but these are not as well attended as they should be.

Monroe County Society has not taken any interest in the district meetings for several years. As councilor of the Second District I have asked the officers for an opportunity to attend some of their regular meetings, but as yet have failed to receive the invitation.

During the last year Sullivan county Medical Society has met regularly each month at the Mary Sherman Hospital. The meetings have been conducted as a staff conference. Interesting cases and all the deaths of the month are discussed. These meetings are very well attended and all physicians present take an active part in the discussions. At one of their meetings there were reported one case of Hodgkin's disease, one of splenomyelogenous leukemia and two cases of acute lymphatic leukemia. At another meeting a case of Addison's disease was presented. At another meeting two cases of carcinoma of the sigmoid and one sarcoma of the shoulder, treated by shoulder amputation, were presented.

At their last monthly meeting a case of undulant fever was presented. All of these cases were well worked up and brought forth very interesting discussions. These meetings have not only been very instructive, but have increased the attendance and enthusiasm one hundred percent.

The annual district society meeting was held in the Odon Park on July 24, 1930. This beautiful park at Odon was an ideal place for such a meeting and the members of the Martin-Daviess counties were splendid hosts. Dr. P. E. McCown, of Indianapolis, was speaker of the afternoon and his talk on urology was well received and discussed. Doctor Wadsworth, of Washington, was elected councilor for the Second District. Doctor Hill, of Bloomfield, was elected president and Doctor Brown, of Carlisle, was re-elected secretary-treasurer. The meeting was not as well attended as it should have been. Monroe, Knox and Owen counties were not represented.

It seems to be the attitude of a great many of the members of the Second District "to let George do it." They are lax about attending the district and state meetings. The societies are negligent about sending delegates to the state association. Some of the appointed delegates who attend the state association do not attend the meeting of the House of Delegates. They seem to take a more active part in attending the movie shows and leave for home without attending to business.

Physicians howl about state medicine, medical legisla-

tion, quacks, etc. Unless every physician becomes more interested in medical politics in the future than in the past they will continue to howl and be run out of their profession.

Doctor Wadsworth, the new councilor, is a wide-awake physician. Let each member of the district help him to make the Second District the best in the state. This can be done by a one hundred percent attendance of the county societies and by sending proper delegates with proper instructions to the state meetings, and by casting out professional jealousy and professional inertia, and by all pushing on the wheel.

G. D. SCOTT, Councilor.

Third Councilor District

Things in this district are about as usual. Good district meetings in the spring and fall.

We have taken in nine new members in the Floyd County Society, which has pretty well unified the profession in the county.

W. J. LEACH, Councilor.

Fourth Councilor District

The annual meeting of the Fourth District Medical Society was held at North Vernon in May, with a regular attendance and a very good program. Madison was selected for the meeting place next year.

It appears that the coming year should find a closer association among the doctors of the Fourth District, due to the improved highway facilities in the district. Practically all of the counties will be connected by hard surface highways by the end of 1930, and it will be very easy to get to meetings any place in the entire district.

The officers in the Fourth District for the coming year are:

President—Dr. N. A. Kremer, Madison.

Vice-President—Dr. A. M. Kirkpatrick, Columbus.

Secretary—Dr. O. A. Turner, Madison.

H. P. GRAESSLE, Councilor.

Fifth Councilor District

The Fifth District Society has held two meetings in the past year, both of which were well attended. The first was held May 2nd, in conjunction with the Vigo County Medical Society and was addressed by Dr. Frank Lahey, of Boston. The second, in the form of a picnic meeting, was held at the Indiana State Tuberculosis Hospital, Rockville, in the latter part of June. At this meeting the members of the Fifth District Society were the guests of Dr. Amos H. Carter, superintendent of the hospital. The members of the staff of the hospital entertained with a scientific program in the afternoon, followed by a picnic dinner in the basement of the auditorium in the evening.

Clay and Putnam counties are both in normal condition and have held regular meetings during the past year. The Parke-Vermillion County Society has not been holding regular meetings, however. Most of the doctors of these counties have been attending the numerous meetings held each month in Vigo county.

At the present time there are 124 physicians in active practice in Vigo county. One hundred sixteen of these are active members in good standing in the society. Four of the remainder are ineligible and of the four remaining eligible men two have their applications before the Board of Censors at the present time. The society lost two members by death during the past year.

The meetings are held monthly alternately at the two hospitals in Terre Haute. Clinical material is presented. The meetings are very well attended, average attendance being fifty.

The larger portion of the credit for the flourishing state of the Vigo County Medical Society is due to the activity of Dr. A. M. Mitchell, secretary.

OLIVER O. ALEXANDER, Councilor.

Sixth Councilor District

The Sixth District met in Richmond on June 12. The program was much above the average and was made up entirely of doctors from the local district.

Late in the fall the district will have another meeting for a review of the maladies incident to the inclement weather of winter and spring.

BAYARD G. KEENEY, Councilor.

Seventh Councilor District

Marion, Morgan, Hendricks and Johnson counties.

Conditions in general are improved in this district over last year.

Marion county has the largest membership in the history of its medical society. The association meets weekly on Tuesday, nine months of the year.

About half of the programs are furnished by local men and the other half by invited guests.

Hendricks county has regular meetings which are well attended. All doctors in the county are members. This county has had some visiting speakers during the year.

Morgan County has had regular meetings during the year. The attendance has been satisfactory.

Johnson county has had an encouraging turn this year. There have been some regular meetings, and these have been well attended. There is special interest in this county in the establishment of co-operative collecting plans.

On the whole there have been no gross violations of medical practice except the regular quacks. Some of these are now in the courts on charges of practicing without a license.

Some beneficial effects of recent legislation is now in evidence in this district.

E. E. PADGETT, Councilor.

Eighth Councilor District

The Eighth District society work has been satisfactorily done by each county unit. No district society has been in existence for a number of years owing to the unusual activity and attractions offered by the Muncie Academy of Medicine. Madison county averages an attendance of over fifty percent of its membership, of sixty, at each of its ten meetings. The Delaware-Blackford county meetings once each month are arranged so as not to conflict with the Muncie Academy meetings. Jay and Randolph County Societies have been more active during the past year than for some time, from reports of their members. Owing to the various hospital organizations through the district requiring attendance at staff meetings, these are liable to take some interest from the county society if they become too exacting or too frequent. The multiplicity of medical societies competing for talent is liable to work to the disadvantage of all persons concerned, for too much talent and too often offered makes it common and unappreciated. The county society must be the one to be supported even at the expense of other meetings.

M. A. AUSTIN, Councilor.

Ninth Councilor District

Medical affairs in the Ninth Councilor District during the last year have been running very smoothly and quite satisfactorily.

It was particularly gratifying to have had a reorganization of the Boone County Medical Society, and, for the first time in several years, the society now is holding regular monthly meetings, the doctors showing an increased interest and growing enthusiasm. The reorganization session was held at the County Hospital, which very graciously served an excellent dinner, and later permitted the use of a pleasant room as the meeting quarters. This has been continued. At this first session, Dr. R. S. Ball was elected president, and Dr. Daniel VanWoerkom was chosen as secretary. They have been doing commendatory work, well supported by others in the society.

The Ninth District meeting was held at Noblesville.

It was attended largely. Dr. J. D. Sturdevant, president, and Dr. Ray Shanks, secretary, together with the other members of the Hamilton County Society are to be commended for their worthy efforts in putting on an excellent program.

In those county societies through this district where any lassitude is evident, their problems are being studied, and no doubt better results will eventuate.

FLOYD T. ROMBERGER, Councilor.

Tenth Councilor District

The Tenth Councilor District reports nothing unusual during the past year; our component societies have been carrying on in good fashion with little to perturb the membership.

Numerically we show no increase in membership, Lake county having had a slight loss. This is due to several deaths and removals and a slow-up in the usual number of new men coming into the county, due no doubt to present industrial and business conditions.

The district meetings, of late having somewhat lagged, promise again to become a live factor in this section. The May meeting at Valparaiso was well attended and plans made for more frequent sessions.

E. M. SHANKLIN, Councilor.

Eleventh Councilor District

The Eleventh Councilor District is justly proud of her county medical societies. Every county is well organized and holds at least eight meetings a year. Attendance at these meetings is good and the programs are always of the highest order. About one-half of these programs are given by outside guests.

The societies which feed their members have the best attendance. The district society has two meetings each year—one in May, another in October. Howard county entertained the society in May.

These meetings are well attended. There usually are one hundred or more M.D.'s in attendance out of a total membership in the district of 196.

The ladies' auxiliary has a meeting the same day in the afternoon. In the evening a banquet is held and here the doctors, their wives and sweethearts join in an evening of entertainment.

The scientific program is held in the afternoon, on which at least one outside guest appears, but always one member has a paper. These meetings are considered by the members the most helpful and entertaining of any medical meeting they attend.

All in all the Eleventh District is in a flourishing condition and proud of her motto, "The Best in the State."

IRA E. PERRY, Councilor.

Twelfth Councilor District

Reports from the secretaries of the county societies which comprise the Twelfth Councilor District show that there has been no material change in the condition of these societies during 1930.

H. O. BRUGGEMAN, Councilor.

Thirteenth Councilor District

Conditions in the Thirteenth District from an organization and a scientific standpoint generally may be said to be good. Due to the fact that your councilor is new and as yet knows little about the duties of his office, he is able to report very little in detail this year. Next year a more detailed report may be expected.

J. B. ROGERS, Councilor.

REPORT OF THE EXECUTIVE COMMITTEE

House of Delegates, Indiana State Medical Association:
Gentlemen:

I. INTRODUCTORY REMARKS:

Despite the general depression that has characterized American business in general and many physicians indi-

vidually since the crash last November, the Indiana State Medical Association has just completed what your Committee believes to be one of the most successful and active years of its entire existence. Acting as representative for the Council and the House of Delegates throughout the year, your Committee met from month to month, checking over the work of the Association at each meeting for the past month and outlining a program of activities for the month to come. In making this report your Committee cannot help but express a pride in the energy and the general healthful condition of scientific medicine and medical organization in Indiana.

Due to the ever-increasing volume of business and the rapidly spreading field of activities of the State Association, it would be impossible to present here a complete report of the many problems requiring detailed study that have come before the Committee. Many of these problems have brought forth questions that have been extremely intricate and complicated. These problems have been touched upon from time to time in the editorial columns, special articles and legal-medical column in *THE JOURNAL*. Hence, your Committee is touching upon only a few of the major subjects that have come before it during the year in this its annual report.

As provided in the By-Laws of the Association the duties of the Committee fall under two general headings:

1. General executive and administrative duties.
2. Special duties in administering medical defense activities of the Association.

II. GENERAL ACTIVITIES:

1. *Membership Report:* Despite the depression the number of members of the Indiana State Medical Association has remained the same as last year and a record of membership as of July 31 this year in comparison with past years follows:

| | |
|---|-------|
| Number of members July 31, 1927..... | 2,632 |
| Number of members July 31, 1928..... | 2,678 |
| Number of members July 31, 1929..... | 2,690 |
| Number of members July 31, 1930..... | 2,690 |
| Number of physicians in Indiana in 1927 | |
| according to A. M. A. directory..... | 4,164 |
| Number of physicians in Indiana in 1929 | |
| according to A. M. A. directory..... | 4,102 |

These figures show that, despite the fact that there are sixty-two physicians less in Indiana today than two years ago, there has been a gain in membership in the Association of fifty-eight members. This means that nearly all the younger men who start practice in the state become members of the Association.

2. *Matters Referred to Committee by House of Delegates at 1929 Session:*

(1) Resolution of House of Delegates creating an Advisory Committee to act with Woman's Auxiliary. By action of the House of Delegates at the Evansville session provision was made for the creation of an advisory committee to act with the Woman's Auxiliary to the Indiana State Medical Association. No provision, however, was made concerning the make-up of this committee. The Executive Committee, acting in its administrative capacity at those times when the House of Delegates is not in session, named the Bureau of Publicity to act as the advisory committee from the State Association for the Woman's Auxiliary.

(2) Question of unconstitutionality of action of House of Delegates in regard to seating a member of the State Board of Health as a delegate. Following the Evansville session the question was raised as to the unconstitutionality of the action of the House of Delegates in giving the State Board of Health representation in the House of Delegates.

History of Resolution: For benefit of the House a short history of this resolution follows: This matter was brought to the attention of the House of Delegates at the Evansville session under the heading of "Unfinished

Business," the secretary reading the following resolution which was presented by Dr. A. J. Hostetler, delegate from LaGrange county, at the 1927 session of the House of Delegates:

"Be It Resolved, that the *By-Laws* of this Association be amended whereby the Indiana State Board of Health may name a delegate to the Indiana State Medical Association, which delegate shall be a physician."

The resolution at the time of its presentation was laid over for one year, to be taken up as unfinished business. The matter came up as unfinished business again at the 1928 session of the House, but upon the request of Doctor Hostetler it was laid on the table. The resolution was adopted and amended to read that "the delegate must be a member of the State Board of Health and a member of the Indiana State Medical Association" when it was passed finally in 1929.

Opinion of Attorney: The matter was referred to Albert Stump, attorney for the Association, who wrote the following opinion regarding the action of the House:

"I have, at the request of your Executive Secretary, examined that part of the minutes of the first meeting of the House of Delegates at the 1929 session which have to do with the attempted amendment to the *By-Laws* admitting a member of the State Board of Health to the House of Delegates.

"In connection with the examination of that part of the minutes of the session I also studied the Constitution of the Association, and the *By-Laws*.

"From such examination and study of the minutes, the Constitution and the *By-Laws*, it is my opinion that the action of the House of Delegates was not effective to accomplish the amendment of the *By-Laws* so that a member of the State Board of Health could be admitted to the House of Delegates. The 'editorial notes' commenting on the situation presents the reasons for the conclusion I have reached as clearly as I could do. The Constitution can be amended only in the manner provided in the Constitution. That is, by presenting in open meeting at an annual session the proposed amendment, then publishing it twice during the ensuing year in *THE JOURNAL*, and then the House of Delegates adopting the proposed amendment by a two-thirds vote of the delegates present at the annual session following that annual session in which the proposed amendment had been presented in open meeting. The Constitution itself provides who can be delegates.

"The *By-Laws* can be amended only in the manner provided in the *By-Laws*. That is by a majority vote of all the delegates present at any annual session after the proposed amendment has lain on the table for one day. The scope of the *By-Laws* cannot be enlarged to change the Constitution. The *By-Laws* are effective only as to matters, consistent with the Constitution, concerning which the Constitution has not made provision.

"I would suggest that the purpose sought to be achieved by the attempted amendment, enlarging the qualifications for membership in the House of Delegates, might be achieved by permitting some member of the State Board of Health to attend and participate in discussions in the meetings of the House of Delegates, but not to have any right to vote. If this suggestion should meet with your approval the plan might be followed as a temporary expedient until the Constitution could be amended in the regular constitutional manner."

Suggestion of Committee: In view of Mr. Stump's opinion your Executive Committee recommends that the proper amendment to the Constitution should be prepared by Albert Stump, attorney for the Association, and in accordance with the suggestion of the Council at its midwinter meeting be presented at the next meeting of the House of Delegates.

3. *Report from U. S. Pharmacopœial Convention at Washington, D. C.:* Upon the suggestion of Mr. Carl E. Nelson, president of the Indiana Pharmaceutical Association, the American Medical Association was asked

whether it would be well for a representative of the Indiana State Medical Association to attend the U. S. Pharmacopœial convention that was held at Washington last May. The American Medical Association indicated that it would be well for Indiana to send a representative. Samuel Kennedy, M.D., of Shelbyville, who has attended these meetings many times in the past, volunteered to attend this meeting as a representative of the Indiana State Medical Association and to pay his own expenses. The Indiana State Medical Association was one of the few state medical associations represented at this very important conference. Doctor Kennedy did not file any formal report concerning the convention, but his informal letter in regard to the meeting is more than enlightening. It follows:

"In answer to your letter of yesterday will say that I attended the meeting of the U. S. Pharmacopœial Convention in Washington, D. C., on May 6, 7, and 8.

"There is not much of a report to make except that the convention was dominated by the proprietary medicine interests. H. H. Rusby, of New York (of Wine of Cardui fame), did most of the talking for the patent medicine interests, and as the convention is composed of more than three-fourths pharmacists, he carried every point with him.

"The protests of Dr. Morris Fishbein, Torald Sollman, and H. C. Wood did no good.

"Dr. Fishbein told me at the Convention that he intended to criticize their actions in the *Journal of the A. M. A.* and he also refused to vote on any of the questions that came up. He has what I consider a very moderate criticism in the *Journal of the A. M. A.* May 24th, page 1707.

"The Committee that does the actual work of revision is composed of seventeen physicians and thirty-three pharmacists. If I can tell you anything further I shall be glad to do so."

4. *Locations for Physicians:* For four years the Executive Committee has maintained a service which has been of aid to any number of physicians. Realizing that a number of communities in Indiana exist where physicians are needed, a list of these communities has been prepared at the headquarters office containing detailed information as to their population, industries, and general character. This list is kept as up to date as possible and the information is available to any physician who may be interested in obtaining a new location. In order to keep this list up to date the salesmen of various pharmaceutical concerns in Indiana have been supplied with blanks which they send to headquarters office when there is a possible vacancy and a need for a physician in a community. The Committee is always pleased to supply this information to any physician requesting it and will be glad to receive the names of any communities where medical services are needed.

5. *Complaint Against Riley Hospital Bulletins:* During the Evansville meeting the Council of the Indiana State Medical Association discussed the bulletins prepared for the lay public by the Extension Division of Indiana University in regard to cures being effected at the Riley Hospital. The Executive Committee was instructed by the Council to investigate this complaint. Burton D. Myers, M.D., dean of Indiana University School of Medicine at Bloomington, and M. A. Austin, M.D., councilor for the Eighth District, who originally brought this matter to the attention of the Council, appeared before the Executive Committee and the bulletins in question were reviewed by the Committee. Doctor Myers assured the Committee that the type of bulletin would be changed and this has been done, so that recently no objection has been raised by the Executive Committee in regard to the bulletins as they now are written.

6. *Survey in Shelby County by the Committee on the Cost of Medical Care:* The Executive Committee cooperated with the Committee on the Cost of Medical Care in making this survey. The Committee recommends that every physician make himself familiar with the facts brought out by this survey. A pamphlet containing de-

tailed information as to the findings may be obtained by writing to Mr. Allon Peebles, the Committee on the Cost of Medical Care, 910 Seventeenth Street, Washington, D. C.

7. *Cooperation with National Food Bureau:* An active campaign against food faddists and quacks was instituted by the National Food Bureau in Indiana and with the cooperation of the Indiana State Medical Association a drive was made to curtail the activities of such men as the following:

"Dr." Paul Sampson, National Health League.

Bernarr MacFadden, *Physical Culture*.

"Dr." Frank McCoy, chiropractor, *Health and Diet Advice*.

"Prof." Paul C. Bragg, Scientific Health Specialist.

"Dr." R. A. Richardson, oculist, lecturer.

Dr. J. D. Levine (has M.D. degree), but not licensed to practice in any other state but Illinois. *The Health Messenger*.

A resolution was adopted by the Committee and distributed to the press of the state by the Publicity Bureau. A copy of this resolution appears in the report of the Bureau of Publicity.

8. *Cooperation with District Tuberculosis Clinics:* Doctor King and Mr. Auerbach appeared before the Committee and spoke of the proposed district tuberculosis clinics. They stressed the fact that such movements can be a success only if close cooperation exists among the State Tuberculosis Association, the State Medical Association, and the State Health Department. These clinics have been held in many counties. Mr. Auerbach explained that the clinic is only a part of the district program. He said that the clinics never had been held with the disapproval of a county medical society. These clinics usually begin at ten a. m. and last until four p. m. They are merely diagnostic in scope, no treatment being given. A letter was written to the district councilors where the State Board of Health and the State Tuberculosis Association were to hold clinics, telling them of the proposed clinics of the State Board of Health and the State Tuberculosis Association and asking the councilors to cooperate with these organizations and to represent the State Associations at these clinics.

9. *Legal-Medical Column in JOURNAL:* Under the direction of the Executive Committee, Albert Stump, attorney for the Association, is conducting a legal-medical column each month in THE JOURNAL answering inquiries as to matters of law of interest to physicians generally. Many favorable comments have been received concerning this column. Mr. Stump will be very pleased to answer any question which any one of the profession may have of a legal-medical nature.

10. *Program Material from Commercial Firms:* At the midwinter meeting of the Council several councilors spoke of the unusually fine films that are being put out by commercial companies. In order to have a complete list of these films a questionnaire was sent from the headquarters office to various firms whose products are approved by the American Medical Association, asking them for the names of films and speakers that might be available upon technical subjects. This list was compiled at headquarters office and is available for use by any county medical society secretary for program material.

III. MEDICAL DEFENSE ACTIVITIES:

1. *Change in the By-Laws:* Committee suggests amendment to Chapter XII, Section 7, of the By-Laws covering medical defense. This amendment to the By-Laws follows:

"The Indiana State Medical Association shall in no case provide medical defense against any actions for malpractice against any physician unless such physician was a member of this Association in good standing at the time the services which are the basis of the suit were rendered, and was also a member of the Association at the time the suit was filed."

2. *Detailed Report of Malpractice Cases Handled by Medical Defense Committee:* A year ago at the time of this report, August 1, 1929, the following fourteen cases were pending before the Committee, and the Committee reports the following progress on these fourteen cases:

No. 128—Case closed due to death of defendant February, 1929. Expense, \$175.00, paid October 5, 1929.

No. 129—Case still pending. No action for several years. Probably can be dropped soon.

No. 134—Suit threatened but never filed. Case dropped as defendant died April, 1929.

No. 140—Suit pending. Filed February, 1926. Word received May, 1929, "No further developments. Probably there will be none for some time."

No. 142—Suit pending but plaintiff not pressing suit.

No. 143—Case decided in favor of physician in county circuit court May 14, 1929. Plaintiff has not yet taken case to supreme court and probably will not. Expense, \$250.00, paid September 23, 1929.

No. 151—Case pending. Suit filed July, 1927. No new developments. Likely that suit will be dropped.

No. 155—Suit threatened but not filed. Probably never will be filed.

No. 156—Suit filed March 27, 1928. Pending. Outlook favorable to physician. Expense, \$66.28, paid September 23, 1929.

No. 158—Suit threatened January 11, 1928, but never brought to trial. Dropped by plaintiff account insufficient cause for suit for malpractice.

No. 162—Case pending.

No. 164—Case closed September 23, 1929, by dismissal of complaint by plaintiff. Expense, \$150.00, paid September 23, 1929.

No. 165—Suit filed July 8, 1929. Case dismissed March 29, 1930. Expense, \$50.00, paid June 16, 1930.

No. 166—Suit filed March 12, 1929. Case still pending.

Since August 1, 1929, and up to August 1, 1930, the following new cases have come before the Committee:

No. 167—Suit filed April 21, 1930. Case pending.

No. 168—Suit filed May 16, 1930. Case pending.

No. 169—Suit filed April, 1930. Case pending.

No. 170—Suit filed June 2, 1930. Case pending.

The total cost of medical defense from August 1, 1929, to August 1, 1930, was \$516.28.

Respectfully submitted,

DAVID ROSS, Chairman.

WM. H. KENNEDY,

A. C. McDONALD,

E. E. PADGETT,

A. E. BULSON.

REPORT OF THE COMMITTEE ON PUBLIC POLICY AND LEGISLATION

House of Delegates, Indiana State Medical Association:
Gentlemen:

I. INTRODUCTION:

Despite the fact that this has been an "off" legislative year your Committee on Public Policy and Legislation has not lessened its activities in the interest of scientific medicine, and we are confident that the profession of Indiana is well prepared to meet and defeat the forces of the cultists if any concerted efforts are made by them when the "big guns start to boom" at the State House next January. Anticipating a radical change in alignments at the coming Legislature, your state committee asks that every society, through its local legislative committee, watch the situation in regard to the election of its representatives and senators with the greatest care.

If any questions arise, do not hesitate to get in touch with the state Legislative Committee.

II. MATTERS REFERRED TO COMMITTEE BY HOUSE OF DELEGATES:

Your Committee has had two questions referred to it by the House of Delegates and wishes to make the following report on these questions:

1. *Insanity Inquest Resolution:* A resolution was presented to the House of Delegates at the Evansville meeting recommending that the Legislative Committee of the State Association be instructed to attempt to amend the law so as to provide some method by which physicians serving in the capacity of examining physicians in insanity inquests may receive reasonable compensations for the services rendered in such inquests. The Legislative Committee referred this matter to Albert Stump, attorney for the Association, for an opinion. The opinion of Mr. Stump follows:

"I have the following report to make on the resolution which you have referred to me concerning the fees payable under the law to physicians in insanity inquests:

"The law provides that the statement alleging the insanity of any person must be accompanied by the statement of a reputable physician that he has examined the person alleged to be insane and setting forth certain facts that may be required by the Board of Trustees of the hospital to which the person, if adjudged insane, will be committed. This physician making the statement accompanying the allegation of insanity, under the law is entitled to receive \$3.00 for his services in making the examination and the statement. This fee is payable out of the County Treasury. As to this physician, he may be the regular family physician. He would be entitled, of course, to charge those responsible for the care of the allegedly insane a professional fee for his services in making the examination. That amount would be a matter within the discretion of the physician and the parties from whom the professional fee would be collected.

"As a matter of policy and not involving any legal questions, it would seem to me that the physician who renders this first service already occupies such a position with the family of the allegedly insane that he might expect reasonably fair compensation for his services. Further legislation affecting his fees would not seem to me advisable, in view of the situation he already occupies and the burden the obtaining of such legislation would cast upon the Association.

"In addition to the services of this first physician who makes the statement accompanying the allegation of insanity, two other physicians must 'examine carefully and separately the person who is alleged to be insane and certify their reports separately to the Judge of the Circuit or Superior Court having jurisdiction of such case.' These two physicians are appointed by the Judge. The first physician is not appointed by the Judge. He is employed by those responsible for the care of the allegedly insane.

"In my opinion the two appointed by the Judge need not accept the appointment nor serve under it. From the nature of the law if they do accept the appointment and serve, they serve as expert witnesses. The written reports which they make, it seems to me, must be regarded merely as expert evidence. The Judge is not authorized to determine whether the person alleged to be insane is in fact insane, merely on the statements made by the physicians. He is required, under the law, to have a hearing and may subpoena the medical examiners to testify further in such hearing. The calling of the medical examiners as witnesses in the hearing is discretionary with the court. These two medical examiners appointed by the court are entitled to pay at the rate of \$3.00 per day 'for making out the certificate and attending the hearing.' Thus if the certificate and the hearing are both had on the same day the examining physicians can obtain but \$3.00 each for their services from the County Treasurer. But if the hearing is not on the same day as the making out of the certificate the examining physicians appointed by

the court could obtain \$3.00 each for making the certificate and \$3.00 per day for attending at the hearing.

"Inasmuch as the examining physicians cannot, in my opinion, be compelled to serve and make the examination and certificate, they could not be compelled either to be witnesses at the hearing as examining physicians. It has been definitely decided in *Buckman vs. State and Dills vs. State* that a physician may lawfully be paid fees for his professional services as an expert witness. This brings us to the conclusion that the examining physicians may refuse to serve under the appointment of the court, unless they have been paid an adequate fee for their services. The amount of that fee would be a matter of contract, express or implied, between the physicians so appointed and those responsible for the care of the allegedly insane. In arriving at what a reasonable professional fee for such services would be, the parties interested would occupy the same position with respect to each other and with respect to the fee chargeable against the county as would be occupied by them as expert witnesses in any other case. That is, the fact that the physician obtained the \$3.00 per day allowed him by the law from the county would not of itself prevent his obtaining pay for his professional services from those responsible for the allegedly insane, if the physician had made such a contract, either express or implied.

"The question of policy in regard to the fees for the examining physician is one in regard to which I would be in no better position to express an opinion than the members of the Legislative Committee or other members of your Association. Volunteering, however, the expression of my reaction to this suggestion in the resolution, in view of the rights as they already exist, which the physician has in these insanity inquests, it seems to me that there is not enough at stake to justify the effort that would be necessary to change the law."

In view of this finding your Committee feels that it would be unwise at this time to undertake to pass legislation in regard to insanity inquest fees unless specifically instructed to do so by the House of Delegates.

2. *Resolution in Regard to Policy of the Indiana State Board of Health in Making Wassermann Examinations:* In 1928 a resolution was introduced by John M. Pulliam, delegate from Allen county, criticizing the State Board of Health for "making a huge volume of Wassermann and other examinations on physicians' private cases at public expense." This resolution was presented to the state Legislative Committee. Your Committee made a lengthy study of the situation and filed its report with the House of Delegates at the Evansville session in 1929, recommending that "the private laboratory men of the state and the members of the State Board of Health appoint a committee to meet, discuss, and work out a proper solution of the question." The House of Delegates adopted the report of the Legislative Committee and a motion was passed that the committee which the private laboratories appoint to meet with the State Board of Health report back to the Legislative Committee and that the State Legislative Committee report back to the House.

In accordance with the recommendation of the Legislative Committee, on August 6, 1930, a committee of private laboratory men met with the members of the Indiana State Board of Health. The report of this committee of private laboratory men follows:

"To the Legislative Committee of the Indiana State Medical Association:

"On August 6, 1930, a committee of laboratory men of the state of Indiana met with the members of the Indiana State Board of Health.

"This meeting was pursuant to a request for such meeting by the House of Delegates of the Indiana State Medical Association and the purpose of the meeting was to devise some means to eliminate free laboratory service for those who are able to pay and to obtain a more satisfactory relation between the State Board of Health and the private laboratories of the state.

"All members of the State Board of Health were

present and after much discussion the following proposal was adopted unanimously by the State Board of Health:

"That there be printed upon these cards sent out by the state laboratory and requiring the doctor's signature the following:

"This patient is financially unable to pay for this laboratory service and I am making no charge for said service."

"Also that there be printed upon these cards in bold face type, and requiring the signature of the patient:

"I am financially unable to pay for this laboratory test and I know the state laboratory charges no fee for said laboratory test."

"Also upon these cards shall be printed:

"Unless the signatures of both the physician and the patient appear in proper place, this test will not be made by the state laboratory."'"

"There probably are unscrupulous physicians who will continue to abuse the privileges offered by the state laboratory, but the great majority is honest and will not falsify its statements. Many of the patients will not falsify their statements. The unscrupulous physician and patient cannot be made in any way to appreciate the ethics of the situation and must remain parasites of the state.

"Therefore, in order to correct as nearly as possible the abuse of the state laboratory facilities and the injustice to the private laboratories the above suggestion was adopted.

A. S. GIORDANO, M.D., South Bend, Chairman,
B. W. RHAMY, M.D., Fort Wayne,
FRANK FORRY, M.D., Indianapolis,
HARRY LANGDON, M.D., Indianapolis,
M. W. LYON, M.D., South Bend."

Your Legislative Committee asks that every individual physician of the state cooperate with the State Board of Health in carrying out any agreement which is made with the private laboratory men.

JOHN H. HEWITT, Chairman,
W. F. CARVER,
O. T. SCAMAHORN.

REPORT OF COMMITTEE ON MEDICAL EDUCATION AND HOSPITALS

House of Delegates, Indiana State Medical Association:

Gentlemen:—From time to time one hears the complaint that out-of-state students are accepted in the Indiana University School of Medicine, and the sentiment is voiced that preference should be given to students of Indiana who have the required scholastic standing.

This is exactly what is done. Not only is preference given to the Indiana boy who has the required scholastic standing, but the out-of-state boy is discriminated against very seriously. First of all, no out-of-state boy is accepted who has not made a scholastic record fifty percent higher than the minimum required of Indiana boys; secondly, the out-of-state student must pay twice the fee paid by the Indiana boy.

For various reasons we feel that we should take some out-of-state students. Texas is the only state in the Union in which the enrollment in the School of Medicine is limited entirely to Texas boys, and considering the fact that of 792 Texas boys who last year were studying medicine, only 275, or thirty-four percent, were studying in the University of Texas School of Medicine, the procedure has not made the school popular with Texas boys, and it is more than likely the best of the Texas boys do not go to the home school. Georgia limits enrollment almost entirely to Georgia boys. With these two exceptions, however, the medical schools of the United States draw their student body twenty to fifty percent from beyond state borders. For instance, the University of Pennsylvania School of Medicine, with an enrollment of 489 students, has only 245 Pennsylvania boys, or almost

exactly half. The Indiana University School of Medicine is, however, ultra-conservative in this matter, and last year only eighteen students were enrolled in all four years of the school from states other than Indiana. This was four and one-half percent of our total enrollment.

All neighboring states and some states at a considerable distance enroll some Indiana boys in their medical schools. For instance, last year there were forty-nine Indiana boys in the five Illinois medical schools; there were twenty Indiana boys in Louisville Medical School; there were fourteen Indiana boys in the Michigan medical schools; and there were ten Indiana boys in the Ohio medical schools. In these four neighboring states ninety-three Indiana boys are getting a medical education, and last year a total of 112 Indiana boys were studying in schools outside the state of Indiana, whereas, as stated above, we accepted only eighteen boys from states other than Indiana.

Of the 574 Indiana boys who last year were studying medicine in some medical school of the United States, seventy-one percent were studying in the Indiana University School of Medicine.

In this part of the United States only two medical schools care for a higher percentage of the boys of their state than the Indiana University School of Medicine. These two schools are the medical departments of the University of Iowa and of the University of Minnesota, and both have received far more liberal financial support than the Indiana University School of Medicine.

The following table compiled from statistics published in the Educational Number of the *Journal of the American Medical Association*, August, 1930, gives a comparison of the percentage of the boys of each state studying medicine, accommodated in the university medical school of that state:

The University of Iowa cares for 76% of the Iowa boys studying medicine.

The University of Minnesota cares for 73% of the Minnesota boys studying medicine.

The University of Indiana cares for 71% of the Indiana boys studying medicine.

The University of Nebraska cares for 70% of the Nebraska boys studying medicine.

The University of Tennessee cares for 64% of the Tennessee boys studying medicine.

The University of Kansas cares for 58% of the Kansas boys studying medicine.

The University of Michigan cares for 45% of the Michigan boys studying medicine.

The University of Virginia cares for 42% of the Virginia boys studying medicine.

The University of Wisconsin cares for 40% of the Wisconsin boys studying medicine.

The University of Illinois cares for 36% of the Illinois boys studying medicine.

The University of California cares for 29% of the California boys studying medicine.

The University of Ohio cares for 25% of the Ohio boys studying medicine.

It will be seen from the above table in what a remarkable way the Indiana University School of Medicine is caring for the boys of Indiana who are studying medicine. This will be appreciated still further when it is understood that—

The 5 medical schools of Illinois care for only 85% of Illinois medical students.

The 3 medical schools of Tennessee care for only 82% of Tennessee medical students.

The 2 medical schools of Virginia care for only 78% of Virginia medical students.

The 2 medical schools of Michigan care for only 76% of Michigan medical students.

The 2 medical schools of Texas care for only 76% of Texas medical students.

The 3 medical schools of Massachusetts care for only 75% of Massachusetts medical students.

The 6 medical schools of Pennsylvania care for only 72% of Pennsylvania medical students.

The 1 medical school of Indiana cares for 71% of Indiana medical students.

The 2 medical schools of Wisconsin care for only 71% of Wisconsin medical students.

The 3 medical schools of Missouri care for only 68% of Missouri medical students.

The 9 medical schools of New York care for only 67% of New York medical students.

The 3 medical schools of Ohio care for only 58% of Ohio medical students.

The Indiana boys who do not secure admission to the Indiana University School of Medicine are not kept out of our medical school by the four and one-half percent of our enrollment accepted from other states, but they are kept out of our medical school because they do not meet our minimum requirements for Indiana boys, because in their premedical course they have not shown the ability to do the work in the sciences which is required of students in medical schools these days.

The most unfortunate boy is not the one who fails to secure matriculation in medical school, but the boy who secures matriculation in medical school and then fails to do the quality of work necessary to hold a place in medical school. The boy who has not been accepted in a medical school may find it possible at some later time to make the application necessary to do the quality of work which will enable him not merely to secure entrance, but to hold a place in class and continue to graduation. On the other hand, the boy who has been accepted and fails finds it practically impossible to secure a second chance in any medical school of the United States, and his opportunity to study medicine is gone for good.

It should be understood that we have a very abnormal situation today in that unprecedented numbers of students are asking entrance to medical schools. Although the total enrollment in medical schools increased from 12,930 in 1919 to 20,378 in 1929, in the fall of 1929 almost as many applicants were refused (6,620) as were accepted (7,035).

In order to give the relative position of the Indiana University School of Medicine among the medical schools of the United States, in point of total enrollment, I give the following list of medical schools arranged according to total enrollment:

| SCHOOL | NUMBER ENROLLED | SCHOOL | NUMBER ENROLLED |
|-----------------------|--------------------|------------------------|--------------------|
| 1. Michigan | 639 | 11. Univ. & Bellevue | 495 |
| 2. Jefferson | 586 | 12. Tufts | 487 |
| 3. Illinois | 549 | 13. Pennsylvania | 478 |
| 4. St. Louis | 530 | 14. Hahnemann | 470 |
| 5. Minnesota | 528 | 15. Long Island | 438 |
| 6. Northwestern | 522 | 16. Tulane | 432 |
| 7. Harvard | 516 | 17. Indiana | 424 |
| 8. Georgetown | 515 | 18. Columbia | 423 |
| 9. Iowa | 508 | 19. Maryland | 414 |
| 10. Loyola | 496 | 20. Univ. of Tenn..... | 405 |

It will be observed there is one school with an enrollment of more than 600. There are 8 schools with an enrollment of 500 to 600, and 11 schools with an enrollment of 400 to 500.

Indiana ranks seventeenth among all schools and sixth among state university medical schools—Michigan, Illinois, Minnesota, Iowa, and Pennsylvania having enrollments larger than Indiana.

The Indiana University School of Medicine has made provision to increase freshman enrollment fifteen percent this fall. This action is taken because of the fact that for four years past we have had each year more than 500 applications for freshman medical school enrollment.

B. D. MYERS, Chairman,
W. C. MCFADDEN,
W. R. DAVIDSON.

REPORT OF THE COMMITTEE ON CIVIC AND INDUSTRIAL RELATIONS

House of Delegates, Indiana State Medical Association:

Gentlemen:—During the past year the Committee has continued its previously established effort to act as arbitrator in matters of dispute between physicians and insurance companies. We have had several requests for aid from the legal profession concerning industrial matters where, if this aid had been given, the information would have been expert testimony.

To enter as a witness in any dispute would tend to destroy the influence of the Committee as an impartial arbitrator if appealed to in the future. This being contrary to the principles established heretofore, the members of the Committee deny the request.

Since the beginning, the principal effort has been in the direction of assisting the members of the Association to receive an equitable compensation for service rendered in cases of industrial injury. The first year of this activity showed the greatest number of cases referred to the Committee for adjustment. Each succeeding year has seen fewer cases coming before the Committee. The method used by the Committee seemed to meet with the approval of the insurance carriers and physicians interested and was welcomed as a promising method for improving a situation that rapidly was developing considerable irritation all around. It is possible that the improvement in the relationship has continued to exert a beneficial influence. Perhaps now the adjustments were mutually satisfactory. These adjustments are now made directly by the doctor and insurance carriers with fewer calls for the Committee to act as arbitrator. If this is not the situation, the members of the State Association are not taking full advantage of all that their membership entitles them, as the services of this Committee have never cost either of the disputants any expense whatsoever.

It is becoming more apparent that the accidents resulting in the injury of those traveling the public highways are developing a new and serious problem for the hospitals and physicians. The injured persons will seek emergency aid from the hospitals and physicians, but after such aid is rendered they often overlook the matter of compensation. Even when the injury is covered by insurance the claims are often settled with the individual and the hospitals and physicians are not paid. In time of emergency the information needed for the collection of these accounts usually is not obtained and, as has been reported, the information given frequently is false. This problem has become a great annoyance to the members of the Association. There seems to be little hesitancy on the part of many of these irresponsibles who appeal for help at the moment of their great need, without regard to the inconvenience of the physician, to evade any or all payment for services rendered. There seems an almost complete absence at times of any sense of gratitude if one must judge their feelings by their actions.

The Committee has started an investigation of this condition. We have sent to all of the hospitals of the state questionnaires for information as to how this matter is handled in their institutions. As yet, very few of these have been returned. No report of this phase of the investigation can be made at this time. The next step will be to interest the profession as a whole through the secretaries of the county societies concerning this problem.

For several years it has been more or less apparent that a liaison should be established between the State Medical Association, the State Association of Nurses and the State Hospital Association. Since these are branches of the same profession, there should be a Committee established where the problem in general could be discussed. The medical profession should be interested more in the activities of the nursing profession, especially where it affects our work directly. The work of the Hospital Association is important to all of us as it is this body that maintains and regulates our workshop. It is for these reasons that the Associations should be brought

in closer union. This thing could be accomplished by such a Committee.

The Committee moves that the House of Delegates give the Committee on Industrial and Civic Relationship this duty.

It is the sense of this Committee that this should be the duty of the Committee on Civic and Industrial Relationship.

W. W. WASHBURN, Chairman.
RICHARD W. S. OWEN,
PAUL GARBER.

REPORT OF COMMITTEE ON NECROLOGY

House of Delegates, Indiana State Medical Association:

Gentlemen:—This committee is very happy to report fewer deaths among the members of our profession during the fiscal year than for any year the present committee has been functioning. We had eighty-one physicians and surgeons leave our ranks since our last report.

The youngest of them was Dr. Oliver L. Fisher, aged thirty-eight years, of Richmond, who died of myocarditis January 10, 1930.

The two oldest ones were Dr. David B. Davis, who died at Thorntown, November 9, 1929, and Dr. E. W. Goodwin, of Newcastle, who died at Mooreland, Indiana, August 25, 1929. Each of these physicians was past ninety years of age.

September, 1929, and March, 1930, led the list in numbers with ten deaths each; October, November and May of 1929 each contributed nine; August, 1929, had eight; December, 1929, January, February and July of 1930, each seven; April of 1930 dropped to five and May of 1930 finished with three.

Forty-five of the number were members of the Indiana State Medical Association, forty-three of the A. M. A., and twelve were Fellows in the latter Association.

Three served as president of the State Association. Dr. Geo. T. MacCoy, of Columbus, was president in 1905; Dr. William F. Howat, of Hammond, in 1912, and Dr. Samuel E. Earp, of Indianapolis, in 1924.

Four served in the Civil War, three saw service in the Spanish-American War, and six were over seas in the service in the World War.

Sixty-eight were graduates of allopathic schools, five were physio-medical graduates, four eclectics and the school preference of the remaining four could not be learned by the committee.

Twenty-two graduated from the Medical College of Indiana, eight from the University of Michigan; the Ohio Medical College furnished eight; the University of Louisville, seven; Rush, eight; University of Pennsylvania, four; Kentucky School of Medicine, six; Fort Wayne, two; Jefferson Medical, one; University of Chicago, one; Cincinnati College of Medicine, four; Physicians and Surgeons of Indianapolis, four; Johns Hopkins, six. There were no colored members among the number, nor were there any women physicians.

The age periods were as follows: Thirty to forty, one; forty to fifty, ten; fifty to sixty, twenty-one; sixty to seventy claimed thirty-one; seventy to eighty totaled sixteen, and eighty to ninety, inclusive, finished with two.

Perhaps the most outstanding men in this group were Doctor Earp, Doctor MacCoy, Doctor Howat and Dr. Lafayette Page, the first three having held the highest official position in our Association.

The combined ages of these doctors was 5,840 years, or an average of approximately sixty-eight and one-half years. A vast advance in longevity over the last eight reports, which is most encouraging indeed as it shows a marked improvement in the living conditions enjoyed by the members of the medical profession.

A beautiful tribute is here paid the medical men and women of our great nation by one who practiced many years, knew the heart and soul, not only of the prac-

tioners, but of the people in general with whom he lived and worked:

"The manliest man of all the race,
Whose heart is open as his face,
Puts forth his hand to help another.
'Tis not the blood of kith or kin,
'Tis not the color of the skin,
It's the true heart that beats within
That makes a man a man and brother."

GEO. G. RICHARDSON, M.D., Chairman.

REPORT OF COMMITTEE ON SECRE- TARIES' CONFERENCE

House of Delegates, Indiana State Medical Association:

Gentlemen:—This committee was given \$1,000 by the council at the annual meeting held in Evansville in 1929. This fund was to be used in defraying expenses of the secretaries who would attend the annual meeting to be held in April, 1930.

This meeting was held in Chicago, Illinois, on April 23, 1930, at the headquarters of the A. M. A. Sixty-five secretaries, including a few officers and councilors, were in attendance.

Dr. A. M. Mitchell was re-elected chairman for the coming year, and the whole committee reappointed.

Thanks is due the Council for aiding this committee in holding its annual meeting.

A. M. MITCHELL, Chairman,
M. A. AUSTIN,
J. B. MAPLE,
J. C. BURKLE,
H. C. WADSWORTH,
W. F. CARVER.

REPORT OF THE BUREAU OF PUBLICITY

House of Delegates, Indiana State Medical Association:

Gentlemen:

- I. INDIANA NEWSPAPER EDITORS PRAISE WEEKLY
HEALTH ARTICLES ISSUED BY BUREAU:

That the Indiana State Medical Association is doing a worth-while service in supplying weekly releases on various questions of community and individual health is the general opinion of the newspaper editors and the members of the medical profession of the state. Nearing the completion of its eight years of work, the Publicity Committee recently wrote to the editors of representative state papers, to county society secretaries, and to officers and councilors of the State Association, asking for comments, both favorable and unfavorable concerning the weekly releases and asking for a frank opinion as to the value of these newspaper articles. That these articles have a real interest for the hundreds of thousands of Indiana readers was the belief of the editors and physicians in the many answers which were received. Your committee regrets that it has not space enough to quote from these letters in their entirety, but it quotes extracts from many of the letters received from the newspaper editors:

The Attica Ledger and Tribune:

"We wish to assure you that we have made good use of this weekly feature in the *Ledger-Tribune* and want you to know that we appreciate these releases and we hope that you will continue to send them to us regularly. I think the service which you have been giving us has been exceptionally good and all of the articles have been very interesting to our readers."

—J. FRANK McDERMOND, JR., Editor.

The Auburn Courier:

"We are much pleased with these articles. Please continue sending."

The Auburn Dispatch:

"Your articles are fine and well written. We believe they are read by all of our subscribers."

The Auburn Star:

"One of best features we have. Keep up the good work. We watch for copy every week and have inserted every story you have mailed."

The Baptist Observer, Indianapolis:

"In reply to your recent inquiry, permit me to say that I believe that the issuing of the weekly Bulletin of the Indiana State Medical Association is a worth-while project. I cannot use all of them in the *Baptist Observer* for lack of space, but I use all that I can. As this is a means of advertising and propaganda, I have to be careful to eliminate those that are insistent on the calling of a physician, as there are osteopaths and chiropractors among our subscribers. I know of at least one such who cut his subscription when I began to publish the Bulletins."—T. J. PARSONS, Editor.

The Bedford Daily Mail:

"We have used some of these stories when space was available and in the future will be glad to receive these stories and I assure you they will be appreciated."

—D. M. SMILEY, City Editor.

The Bicknell Daily News:

"Concerning the articles which you have been sending out. I have used many of them; some I do not. It depends more on the room we have in our little paper than on the make-up of the stories, although I would run more of them if they were shorter."

—R. E. OSBORN, Editor.

The Bloomington Star:

"The weekly health stories have been used continuously in *The Bloomington Star* for more than a year."

—PAUL L. FELTUS, Editor.

The Bloomington World:

"We've used many of them, especially some of the very timely articles. Better are they than ever before."

—G. W. PURCELL, Editor.

The Boonville Standard:

"We consider the health stories of great value and mighty good reading matter for our readers. We have no suggestions to offer and we think the subjects are very ably edited. We can see no improvement that could be made. We are very thankful to you for the articles."

—CHAS. H. JOHNSON, Editor.

The Christian Conservator, Huntington:

"I am sure that these stories are serving a good purpose in the case of many people who read them and merit the attention of many more. I am sure that I do not feel competent to suggest any improvement in them."

—W. H. ZEIGLER, Editor.

The Clay City News:

"I have followed with interest your weekly releases of health news stories in other newspapers, and in the past few weeks have used several of the stories in our own paper. It seems to me the stories must do a great deal of good and I have no criticism to offer, unless it be that the stories be made as short as possible without sacrifice of value."

—E. GRAMES, Editor.

The Coatesville Herald:

"We are using your articles whenever possible."

—HARMON H. HATHAWAY, Editor.

The Columbia City Post and Commercial-Mail:

"We like your publicity stories very much and have used practically all of them. Since you ask for suggestions, we might make this one: that you make the stories a trifle shorter and perhaps use more of them. The average small town newspaper can handle several short stories better than one rather long one."

—JAMES D. ADAMS, Editor.

The Daily Clintonian:

"I am offering no unfavorable criticism except as regards the length of the releases for small papers. We use much of the material sent us, but generally find it necessary to cut it."

—MRS. HARRIET R. PIERCE, Publisher.

The Danville Republican:

"We have used your Bulletins in considerable number and we think their publication does good. The articles are well written in a clear manner."

—JULIAN D. HOGATE, Editor.

The Frankfort Morning Times:

"We appreciate most sincerely the work you are doing and trust your efforts have not been in vain. We also trust it may be our good fortune to continue to receive regularly this publicity, which we firmly believe has done a great amount of good."

The Franklin Star:

"We have been using your articles and consider them good reading."

—RAY SELLERS, Editor.

The Grail, St. Meinrad, Indiana:

"We believe that this service is very valuable and doubt not that it is favorably received by the many who read it. Being in popular form, it is more apt to be read than if it were more scientific."

—BENEDICT BROWN, O.S.B., Editor.

The Huntingburg Independent:

"We have greatly appreciated many of your articles, and have used most of them."

—SADIE DUFENDACH, Editor.

Indiana Farmers' Guide, Huntington:

"I have been much interested in your articles or 'stories' and usually find something of interest that helps in answering letters of inquiry on health subjects. I do not have any criticism of your service. I have found your weekly productions helpful and quite educative, giving practical information on subjects that are of interest to editors and their readers."

—LAURA E. SHANKS, Editor, Home and Family Dept.

The Indiana Jewish Chronicle, Indianapolis:

"Let me say that the service you are rendering the public is highly commendable. We are pleased to publish your articles whenever space permits and regret when we are unable to do so."

—MORRIS STRAUSS, Editor.

The Indianapolis News:

"There is no subject of greater interest than health. Whatever the means used to convey to the public information that will aid the individual or help the community in which he lives is commendable."

"The reading public long ago came to recognize that any article or series of articles under the sponsorship of the Indiana State Medical Association had merit. The weekly medical stories provided the press by the medical association are written in plain, everyday, understandable language. Subject matter has been timely and I have no doubt thousands of Hoosiers are well and happy today because they followed advice given in these weekly medical stories."

—RAY D. EVERSON, Managing Editor.

The Indianapolis Star:

"The weekly health articles from the Bureau of Publicity of the Indiana State Medical Association have been generally used by *The Star* when released for morning papers. We have found much of news value in them and I believe the Medical Association is rendering a fine service to the public in making this information available to all."

—JAMES A. STUART, Managing Editor.

The Lawrenceburg Register:

"We believe that these articles are quite different from much of the publicity received by us in that they give information of value to every family. We might suggest that the releases be made no longer than is absolutely necessary in order to carry the thought, as most newspapers today are crowded for space the greater part of the time."

—BERNARD MCCANN, Editor.

The Madison Daily and Weekly Herald:

"We have used all your articles on scientific medical subjects which we regard as being very interestnig and

instructive and we believe much good has been accomplished. On several occasions we used the articles as editorial matter. We hope you will continue the service, which in our opinion is a great educational campaign."

—JOHN B. NIESSE, Treasurer and Business Manager.

The Mount Vernon Western Star:

"In reply to yours of the 11th, we receive your articles and seldom fail to publish them as we know they are needed by our readers." —JOHN C. LEFFEL, Editor.

The News-Sentinel, Fort Wayne:

"We use your health 'stories' every week and find them very much worth-while. The Indiana State Medical Association is rendering a fine service in providing these health 'stories' and we trust the good work will be continued indefinitely." —ARTHUR K. REMMEL, Editor.

The Plymouth Daily Pilot:

"Your stuff is very good and we use most of it."

—SAMUEL E. BOYS, Editor.

The Princeton Daily Democrat:

"We appreciate the service sufficiently to give many of the stories space. Thanks for the service."

—J. C. GORMAN, Editor.

The Richmond Palladium:

"We find the service satisfactory and use it regularly."

—F. M. FEEGER, Editor.

The Rockville Tribune:

"Our comment on the articles that we have received could be nothing but favorable. We have used a number of the articles that you have sent us and consider them good stuff. You may rest assured that we will continue to cooperate with your department in the publicity that you are sending out." —GEO. SCHWIN, JR.,

Pres., Rockville Tribune Publ. Corp.

Shelbyville Democrat:

"Our best endorsement of the weekly health articles issued by the Indiana State Medical Association is our use of every article. The service should be continued by all means for it accomplishes much good."

"All the articles have been enlightening and easily understood. Many of our readers have commented favorably on the health series and we are pleased to extend our personal praise of the service."

—WRAY E. FLEMING, Editor.

The Spencer Evening World:

"Your weekly health 'stories' have in my opinion been widely read. This is true, I know, in my own territory and I have had numerous comments on them. The wide publication of the articles in the newspapers indicates that they are very acceptable and for my own part, I look forward to your weekly release."

—C. A. LIVINGSTON, Mng. Editor.

The Terre Haute Tribune:

"The *Terre Haute Tribune* has, I believe, reprinted every one of these articles. I consider that they are valuable news, that the paper is doing a public service in assisting in disseminating this news, and the readable manner in which this matter is prepared recommends it to the editorial desk as choice copy."

"I have used it frequently for editorial matter. No subject intrigues the human mind more generally than does the subject of health. Each of these stories has its own singular message, each brings to the reader some valuable information in crisp and entertaining form. I believe they constitute one of the best services the State Medical Association is performing for the public."

—W. F. CRONIN, Editor.

The Union City Times:

"Your articles are excellent and of the kind the newspapers like, on timely subjects."

—ROY PATCHELL, Editor.

The Wabash Plain Dealer:

"We have used a majority of the press releases sent

out by the Medical Association and personally I think they are very good." —EARL W. HAMER, Editor.

In addition to these letters many favorable comments upon the work of the Bureau have been made by physicians of the state. The Bureau does not quote any of these letters, but wishes to thank the individual physicians for their help and cooperation in this work.

The suggestions and criticism of the articles made by the editors may be grouped under the following headings:

- (1) The most frequent criticism, when criticism was made, was that the articles sometimes were too long.
- (2) One editor who uses the articles frequently suggests that the form of the articles be changed from time to time merely for the sake of variety.
- (3) Several papers use syndicated features by Dr. Morris Fishbein and the late Lulu Hunt Peters (who has been succeeded by Dr. Logan Clendening) and do not use Publicity articles regularly.
- (4) One editor suggests that the release date be moved to Thursday in order to meet requirements of practically every weekly newspaper in the state.
- (5) One editor wrote: "Whenever we considered these articles as too much of an advertisement for physicians, we did not use them, as we do not approve of the fact that it is against medical ethics to advertise, and so try to avoid giving any free advertising."

II. COOPERATION WITH OUTSIDE AGENCIES:

Carrying on its work in accord with the instructions received from the House of Delegates three years ago, your Bureau has acted as a special committee to confer with various organizations on matters pertaining to activities of these organizations and their relation to the medical profession. Among these outside agencies with which the Bureau cooperated during the year are the following:

- (1) Medical Society of Virginia. Request of officer of the Virginia Medical Society for outline of work that is being done by the Bureau of Publicity and headquarters office of the Indiana State Medical Association.
- (2) Request similar to the above by an officer of the Medical Society of the State of Washington.
- (3) Request similar to the above from the Minnesota State Medical Association.
- (4) White House Conference on Child Health and Protection.
- (5) Committee on the Cost of Medical Care in regard to Shelby County Survey.
- (6) Marion County Tuberculosis Society and Indiana Tuberculosis Association in regard to Early Diagnosis of Tuberculosis Campaign.
- (7) Child Hygiene Department of the State Board of Health in regard to May Day program.
- (8) National Hospital Day Advisory Committee of the National Hospital Association in regard to National Hospital Day.
- (9) Better Business Bureau in regard to numerous quacks.
- (10) Better Business Bureau of Rochester, New York, requested copies of all radio talks that had been given in past year by Publicity Bureau over Station WFBM, Indianapolis.
- (11) Bureau of Publicity appointed by Executive Committee to act in advisory capacity with the Woman's Auxiliary of the Indiana State Medical Association. In this capacity aid was given by the Bureau of Publicity and headquarters office whenever asked by the Auxiliary.
- (12) Medical Economics Committee of the Iowa State Medical Society.
- (13) Indiana Manufacturers of Dairy Products and Indiana Bakers' Association in regard to the lectures by "Prof." Bragg.
- (14) Commonwealth Fund, New York.

- (15) State Board of Medical Registration and Examination.
- (16) National Food Bureau in regard to fight against food fads.
- (17) Minnesota State Medical Society made request to be placed on mailing list.
- (18) JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION in regard to the alleged suppression by Christian Scientists of Edwin Franden Dakin's book entitled "Mrs. Eddy—the Biography of a Virginal Mind."
- (19) Director, Educational Reference, Department of Public Instruction, State of Indiana.
- (20) Indiana Parent-teacher Association.
- (21) Indiana State Health Council.
- (22) *Indianapolis Medical Journal*.

III. ANSWERS OF BUREAU TO CERTAIN QUESTIONS IN REGARD TO VACCINATION AND IMMUNIZATION OF SCHOOL CHILDREN, HEALTH EXAMINATION, AID TO INDIGENT, ETC.

These answers of the Bureau were given in reply to a questionnaire from the Medical Economics Committee of the Iowa State Medical Society. They are published here because the same questions have arisen here in Indiana:

- (1) Vaccination and immunization of school children.
Shall it be done by family physician, school physician, or health officer?
In doctor's office, in school, or at home?
Regular fees, or at reduced rates?

It is preferable to use vaccination and immunization for school children either at their homes or at the office of the family physician. If it is an epidemic or emergency it can be delegated to the health officer and performed by him or the family physician in the school. Regular fees as a rule should be charged.

- (2) Health examinations. Who makes them? Fees?
Should the profession encourage them? What publicity?

Health examinations should be made by the family physician as a rule and the profession should be urged to make regular periodic examinations. In Indiana the Bureau of Publicity has supplied every member of the Indiana State Medical Association with a booklet on this subject prepared by the American Medical Association. Through its weekly releases and through its staff of speakers the Indiana State Medical Association is stressing constantly the importance of periodic physical examinations and emphasizing the fact that bodily bookkeeping is of more importance than commercial bookkeeping and that physicians and patients should preserve the records of examinations made, for the benefit of the patient.

A reasonable fee always should be charged by the physician making the examination and the examination should be made so thoroughly that the fee is earned. Publicity through district and county medical societies and constant emphasis upon its importance through all avenues of publicity is a part of the task of the Bureau of Publicity of the Indiana State Medical Association and also of each county society.

- (3) What attitude should members of the society take toward clinics?

This question is not clear as to the type of clinics referred to or the manner of conducting them. If it is meant to refer to medical society postgraduate courses, they are commendable. If it is meant to refer to so-called baby clinics and publicity stunts by individual physicians or local or state health officers, they are most objectionable. The latter class of so-called clinics is of little or no scientific value and lead to objectionable personal prominence of individual physicians and health officers conducting them. Their educational value to the public is limited generally to an emotional appeal and the reaction usually is transient and misleading in its effect upon the public.

- (4) What should be our attitude toward 4H Club health contests? Baby health contests? Charges?

The attitude toward 4H health contests should be conservative and advisory. The same applies to baby health contests. Both are of questionable value and any professional service rendered in connection therewith should be compensated for at regular prices.

- (5) On what terms should we doctor the indigent?

The attitude of the profession toward the indigent is always humanitarian. Rightly applied in well-organized communities it means the promotion and intelligent direction of organized effort for relief of the indigent and the promotion of self help by the indigent.

- (6) Is the relationship equitable as commonly exists between corporation physicians and surgeons and the other members of the profession?

This question is not at all clear in our minds and would have to be amplified if answered in full.

- (7) What should be the connection between the medical profession and large lay organizations which are interesting themselves in personal hygiene and public health?

The attitude of the medical profession in relation to lay organizations should always be one of conservative interest and helpfulness. It should only involve cooperation where substantial public good obviously can be accomplished.

- (8) Should the medical profession seek publicity through ethical advertising? If so, which unit (city, county, state, nation) should do the advertising?

No. There is no such thing as ethical advertising. The printing of a card bearing a physician's name and indicating his office hours and location properly cannot be regarded as advertising. There is a difference between advertising and legitimate publicity of scientific information and effort. Doing one's work well and interpreting it as impersonally as possible to the medical profession is the best way to extend one's reputation, but this fairly cannot be called advertising.

IV. PROTEST OF BUREAU AGAINST VARIOUS FORMS OF QUACKERY:

Carrying on the true tradition of the Bureau, your committee during the past year has been active in cooperating with various authorities of the state to suppress medical frauds in one form or another. Among those frauds against whom the Bureau has protested and waged an active fight are the following:

- (1) Koch Cancer "Foundation."

The following warning was sent to newspapers of the state in regard to Koch cancer propaganda:

"KOCH CANCER FOUNDATION"

"215 E. Jefferson Avenue, Detroit, Michigan
"ADVERTISING STOPPED IN INDIANAPOLIS"

"Some weeks ago this outfit, under the guise of offering a treatise on the 'Danger Signals of Cancer,' as pointed out by a 'famous physician and biological chemist,' and offering in this connection a 'limited author's edition of this book at two dollars a copy,' secured the publication of an advertisement in one local paper. The attention of the paper was called to a report which we had on Dr. Koch and his treatment, with a result that the paper promised that no further advertising of this concern would be acceptable. All daily papers were likewise notified and no further advertising has appeared.

"Koch has been in the limelight with his 'cancer cure' for some time. At his request, we are advised, the Wayne County (Michigan) Medical Society has at different times appointed three committees for the investigation and report on the Koch Treatment. Each of the three reports has been unfavorable. The last report closed with the statement: 'Out of the hundreds of cases Koch has probably treated these were demonstrated to us as his best results. In no instance have we found a case where the diagnosis of cancer was absolutely established and where no other form of treatment had been used in which a cure or any decided benefit had ever been obtained.' In 1926 the American Medical Association wrote in their publication: 'Seven years have passed, during which time Dr. Koch has seen fit to keep his secret to himself. During that same time we have been unable to learn of a single instance in which a case of unquestioned malignant disease has been cured by the Koch treatment. On the other

hand, we have received information regarding individuals who "promptly died" after taking the treatment."

"Recent complaint has been made to the Bureau that there are some doctors in Indianapolis that are using this treatment on their patients, and those coming to our attention indicate that the treatment has been valueless to them. In one case the patient had been treated with the Koch treatment for nearly a year and stated that she was gradually getting worse."

"The Koch Cancer Foundation is the latest promotion of Koch. In this connection he has also organized the Koch Laboratories, Inc., which latter organization is the sole owner and manufacturer of what Koch calls his 'antitoxin.' It is said that there is a contract between the Koch Laboratories and the Koch Cancer Foundation whereby 'the antitoxin will be distributed through the Foundation only to its stock holders and members.' Through a press agent in New York City, mimeographed material has been sent to papers throughout the country, prepared in the form of news articles for 'immediate release.' The headlines were so worded as to catch the eye of any who may be interested in the subject of cancer, and especially so as to disguise the advertising feature of these unpaid advertisements. A more complete report on this concern, its history and some of the unfavorable results, is in our files for the benefit of anyone interested."—(Reprinted from *Better Business Bureau Bulletin* of November 14, 1929.)

- (2) "Free" lectures of "Prof." Bragg. "Prof." Bragg appeared in Indianapolis to give an extended series of lectures. Through the Better Business Bureau and the National Food Bureau, information concerning "Prof." Bragg was obtained by the Bureau and it is believed that his tour of Indiana was somewhat curtailed as a result.
- (3) Calbro-Magno-Wave electronic apparatus exploited by a chiropractor at Monticello, Indiana, and demonstrated by "Dr." T. G. Sturgis, Omaha, Nebraska. Matter referred to State Board of Medical Registration and Examination. As a result, Sturgis left the state.
- (4) Fight against food fads.

The Executive Committee presented to the Bureau of Publicity for its approval the following resolution in regard to food fads:

"WHEREAS:

Much misinformation is promulgated today concerning the question of diets, thus causing the introduction of food fads very few of which can take the place of the older staple foods; and whereas,

Any balanced diet should contain animal protein, fruits, vegetables, especially the leafy vegetables, and the better grades of bread prepared from flour which will insure adequate vitamin and mineral salt content, digestible fat such as butter-fat, and sufficient of the digestible carbo-hydrates to afford readily available energy; and whereas,

The allegation that white bread, meat or any other staple food, when employed in mixed diet is responsible for certain grave illnesses, is not supported by scientific facts,

"THEREFORE, BE IT RESOLVED THAT:

We desire in the public interest to place on record that in our opinion:

1. The exaggerated claims for various fad foods are unwarranted by scientific evidence or practical experience; and the advertising and other propaganda furthering their substitution for the older articles of diet should be condemned.
2. The danger of nutritional deficiencies has been grossly exaggerated. No one food is a perfect food; but a diet consisting of dairy products, leafy vegetables, fruits, meats and easily digested starches furnishes an excess of all food factors necessary for proper growth and nutrition and resistance to disease.
3. Any variation from a normal diet should be prescribed only by a properly trained physician after a careful study of the dietary requirements of the individual seeking advice.

"By action of Executive Committee.

"INDIANA STATE MEDICAL ASSOCIATION.

"Adopted at Indianapolis, Indiana,
this 14th day of January, 1930."

This resolution received the approval of the Bureau of Publicity.

- (5) Tricho System of removal of superfluous hair.

The House of Delegates of the American Medical Association passed the following resolution in regard to the Tricho System:

"WHEREAS, The members of the Section on Dermatology and Syphilology of the American Medical Association are seeing more and more frequently x-ray burns of the skin and some of them serious burns, due to treatment of hypertrichosis, by the tricho system, and by allied systems employing radiation, and

"WHEREAS, The Bureau of Investigation of the American Medical Association has exposed the dangers of this practice, therefore be it

"Resolved, By this Association that this method of treatment for hypertrichosis be condemned as highly dangerous to the patient, and be it further

"Resolved, That all patients suffering from the effects of this type of treatment and seen by members of the medical profession be reported to the Bureau of Investigation of the American Medical Association."

The Better Business Bureau issued a bulletin concerning the Tricho System which has been summarized by the Bureau of Publicity and sent to the editors of newspapers throughout the state.

- (6) "Dr." Frank McCoy, a so-called health columnist whose articles have appeared in some of the newspapers in Indiana. The facts concerning McCoy have been distributed by the Bureau of Publicity.
- (7) Lida Chase Duncan, Cleveland, Ohio, advertising a "genuine coagulating machine" which was to be used as a sure cure for no less than thirty-seven ailments including cancer. Better Business Bureau checked the advertisement of this machine in Indianapolis newspapers.

From time to time details concerning the above methods of quackery have appeared in THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION under the minutes of the Bureau of Publicity. The Bureau respectfully refers you to these minutes for details.

V. NEWSPAPER RELEASES PUBLISHED SINCE LAST REPORT OF BUREAU:

Rabies or Hydrophobia.
Another Fallacy Passes.
Preparation of Children for School.
Annual Meeting at Evansville.
High Blood Pressure.
Radium Jugs—The Bunk.
Hoosierland's Health Harvest.
That Health Appeal.
The Family Medicine Chest.
Where Do You Sleep?
Smog Sickness.
Holiday Health.
Tribute to United States Public Health Service.
Cerebro-Spinal Meningitis.
Health Resolutions.
Germs.
Food Fads.
Carbon Monoxide Gas.
Shock Troops Against Disease.
The Common Cold.
The Shingles Legend.
The California Cancer Treatment.
Trachoma.
Spring Exercise.
Early Diagnosis of Tuberculosis Campaign—Protect Your Child.
Taking the Ax Out of Laxatives.
An Unpaid War Debt (Trench Mouth).
May Day.
Hospital Day, May 12.
Keep Your Eye on the Ball.
Vacation and Typhoid Vaccination.
Poison Ivy.

Safe and Sensible Swimming.
 Those Hectic Hiccoughs.
 A Hoosier Crusader.
 Chiggers.
 Tree Sitting.
 Sunlight, Suntan and Sunburn.
 Danger of Whooping Cough.

These releases are distributed as follows:

1. Eight hundred to Mrs. Edna Hatfield Edmondson, field worker of the Extension Division of Indiana University, to be distributed from there to the women's clubs and parent-teachers' associations of the state each week.
2. Fifty to Nurses' Board of the State.
3. Fifty to the secretary of the Indianapolis Women's Christian Temperance Union.
4. Each councilor and secretary of each county medical society gets a copy of each article.
5. Editors of 250 newspapers and magazines of the state receive copies. Besides these, the articles are carried in the *Hoosier Health Herald* of the Indiana Tuberculosis Association and several other health publications of the state, including twelve religious, fraternal and farm journals.

During the year thirty newspapers were added to the mailing list and only one editor expressed any feeling against using the material.

VI. RADIO TALKS:

Radio talks as follows have been given each week throughout the year on Saturday night over Station WFBM of the Indianapolis Power and Light Company:

Preparation of Children for School.
 When the Ambulance Siren Sounds.
 High Blood Pressure.
 Radium Jugs—The Bunk.
 Hoosierland's Health Harvest.
 The Family Medicine Chest.
 Mumps.
 Where Do You Sleep?
 Tularæmia.
 When Winter Comes.
 The Greatest Life Saving Campaign.
 The Symbol of Mercy.
 Save the Children.
 A Mighty Christmas Gift.
 Cerebro-Spinal Meningitis.
 Health Resolutions.
 Tribute to Public Health Service.
 Germs.
 Food Fads.
 Carbon Monoxide Gas.
 Shock Troops Against Disease.
 The Common Cold.
 The Shingles Legend.
 The California Cancer Treatment.
 Trachoma.
 Spring Tonics and Spring Fever.
 Exercise.
 Early Diagnosis of Tuberculosis Campaign—Protect Your Child.
 May Day.
 National Hospital Day (Chairman of Committee).
 Taking the Ax Out of Laxatives.
 Keep Your Eye on the Ball.
 An Unpaid War Debt.
 Poison Ivy.
 Safe and Sensible Swimming.
 Those Hectic Hiccoughs.
 Lockjaw Weeks.
 Comments on Dr. H. W. Wiley—A Hoosier Crusader.
 Chiggers.
 Sunlight, Suntan and Sunburn.
 Tree Sitting.
 Infant Care in Warm Weather.
 Danger of Whooping Cough.
 Protection Against Typhoid Fever.

VII. SPEAKERS SENT OUT BY THE BUREAU:

Throughout the year many requests have come to the Bureau of Publicity to supply speakers for both medical and lay meetings. In addition, the Bureau of Publicity has been indirectly responsible for obtaining speakers and arranging programs for various other meetings. Since the last annual report of the Bureau the following meetings have been addressed by Bureau speakers:

1929

Sept. 3—Rotary Club, Anderson.
 Oct. 30—Grant County Medical Society, Marion.
 Dec. 2—Rush County Medical Society, Rushville.
 Dec. 3—Kokomo Rotary Club, Kokomo.

1930

Jan. 6—Rush County Medical Society, Rushville.
 Jan. 21—Delaware-Blackford County Medical Society, Muncie.
 Feb. 12—Tri-County Medical Society, North Vernon.
 Feb. 14—Floyd County Medical Society, New Albany.
 Feb. 24—Jefferson County Medical Society, Madison.
 Mar. 3—Rush County Medical Society, Rushville.
 Mar. 11—Henry County Medical Society, Newcastle.
 Mar. 14—Adams and Jay County Medical Societies, Decatur.
 Mar. 25—Grant County Medical Society, Marion.
 Mar. 28—Miami County Medical Society, Peru.
 Apr. 8—Sheridan Rotary Club, Sheridan.
 Apr. 24—Cass County Medical Society, Logansport.
 May 12—Boone County Medical Society, Lebanon.
 May 14—Fourth District Medical Society, No. Vernon.
 May 15—Eleventh District Medical Society, Kokomo.
 May 15—Ninth District Medical Society, Noblesville.
 May 15—Sixth District Medical Society, Richmond.
 May 21—Annual meeting of the Indiana Pharmaceutical Association, Lafayette.
 June 2—Johnson County Medical Society, Franklin.
 June 3—Boone County Medical Society, Lebanon.
 June 5—Fountain-Warren County Medical Society, Covington.
 July 2—Grant County Medical Society, Marion.

VIII. OPINION OF THE BUREAU IN REGARD TO THE PUBLICATION OF SCIENTIFIC PAPERS IN THE PUBLIC PRESS BEFORE THEY ARE PUBLISHED IN A SCIENTIFIC JOURNAL:

The Bureau of Publicity recently having been asked for an opinion on the question of releasing professional papers read before medical societies prior to their publication in a medical journal is of the opinion that it is unethical, unwise, and misleading to publish medical articles in lay papers, especially before their publication in medical journals. Publication of technical topics in newspapers often promotes personal publicity in an objectionable manner. Such publication invariably tends to emphasize some sensational or supposedly sensational phase of the topic under consideration. Newspapers often are not competent to interpret rightly medical topics that previously have not been explained and elucidated by medical editors or by physicians thoroughly familiar with the subject presented in the paper. No safe rule exists which permits publicity in newspapers of a technical subject which previously has not been interpreted by competent medical critics. Conservative advice on matters of public health, especially during epidemics, occasionally may be permissible, but should be as impersonal as possible.

IX. NEW FORMS FOR MAKING REPORTS OF MEDICAL MEETINGS:

A request was received from the News Editor of the *Journal of the American Medical Association* asking that programs of important medical meetings, giving the names of speakers, the exact titles of their papers or talks, and the place and date of the meetings, be mailed to the American Medical Association. In answer to this request the Bureau prepared medical meeting report forms

which were distributed from time to time to the secretaries of the various county medical societies. This form follows:

REPORT ON MEDICAL MEETING

Name of Organization _____
 Place _____
 Date and time _____
 Speaker _____
 Title of paper _____
 Special features and comments: _____

This blank is to be made out immediately following meeting and mailed to Thomas A. Hendricks, Executive Secretary, 804 Hume-Mansur Building, Indianapolis, Ind.

Since this form has been distributed many reports have been received from county medical society and district meetings. The Bureau hopes that the secretaries will continue to fill out these forms after each meeting and return them to headquarters office immediately so that proper reports may be made both to *The Journal of the American Medical Association* and *THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION* in regard to medical meetings.

X. PAID ADVERTISEMENT OF MEDICAL MEETINGS IN NEWSPAPERS:

An experiment is being carried on in Lake County in the manner of running a paid impersonal advertisement of the county medical society meetings the day before each meeting. The advertisement follows:

"If you contemplate calling on your physician on _____ (date) _____, please do so before 7:30 p. m. as he wishes to attend the meeting of his County Medical Society, at Gary Mercy Hospital, on that evening.

"A regular attendance at these meetings is your assurance that your doctor is in touch with modern medical and surgical progress.

"THE LAKE COUNTY MEDICAL SOCIETY."

The Bureau was very much impressed with this type of medical society advertising and feels that it would be well to carry out this experiment. It hopes that within the next year the Lake County Medical Society will be able to make a report that such advertising is beneficial both in regard to the attendance at medical meetings on the part of the physician and a realization on the part of the public that a physician should attend medical meetings.

XI. APPOINTMENT OF HISTORIAN BY BUREAU OF PUBLICITY.

At the Evansville meeting the House of Delegates referred the question of establishing Archives of Medical History in Indiana and the appointment of an historian to the Bureau. Considerable attention has been given to this request by the Bureau and some historical data have been assembled. It is a matter of such importance that the Bureau requests additional time before making further recommendation.

XII. FINANCIAL STATEMENT OF THE BUREAU:

The expenditures of the Bureau from August 1, 1929, to August 1, 1930, follow:

| | |
|------------------------------------|----------|
| Clipping service | \$ 66.55 |
| Postage | 176.35 |
| Stationery and mimeograph supplies | 164.02 |
| Traveling expenses of speakers | 5.14 |
| Printing | 5.25 |
| Miscellaneous | 5.88 |
| Total expense | \$423.19 |

The Bureau was allowed by the Budget Committee \$550.00 for the year of 1930. Of this amount the committee has spent \$255.48 from January 1 to August 1,

1930, leaving a balance of \$294.52 unexpended in the budget for the remainder of 1930.

XIII. CONCLUSION:

In conclusion the Bureau wishes to express its regret over the resignation of Dr. J. A. MacDonald, of Indianapolis, from work on the Bureau. It was Doctor MacDonald who introduced the resolution in the House of Delegates in 1922 which resulted in the creation of the Bureau of Publicity. Doctor MacDonald served for a number of years as a member of the Bureau and it was with regret that the Bureau accepted his resignation due to the fact that as president of the Indianapolis Medical Society Doctor MacDonald felt he could not devote the time to Bureau work that he felt was necessary.

The Bureau again wishes to express its sympathy to the relatives and friends of Dr. Samuel Earp, whose death occurred this year, as Doctor Earp was a member of the Bureau of Publicity for three years—1926, 1927 and 1928.

WILLIAM N. WISHARD, Chairman,
 C. P. EMERSON,
 J. H. STYGALL.

REPORT OF THE DIPHTHERIA COMMITTEE

House of Delegates, Indiana State Medical Association:

Gentlemen:—The Diphtheria Committee, appointed in the early months of the present year, began its activities by meeting with the Executive Committee and other interested persons at the office of the Executive Secretary, February 24, 1930. Various plans for the prosecution of the work were proposed and discussed.

It was agreed that for the present the committee should confine its activities to the putting of the program before the profession and the public. With more organization and with funds for the purpose it might be possible to assume a more aggressive attitude, but it is doubtful if this would be advisable. The committee believes that diphtheria will be best controlled by a campaign of constant hammering on the principles of prevention, and immunization; it does not expect to eradicate this disease in the space of a few months.

Six articles on the subject of diphtheria have been sponsored by the committee and have been published in *THE JOURNAL*. In addition to this we have each month reported on the distribution of deaths from the disease in the state; a record of the distribution of cases as reported to the State Board of Health also has been kept. A number of editorials also have been prepared for *THE JOURNAL*.

Approximately fifteen talks before medical societies, women's clubs and luncheon clubs have been made. An exhibit on diphtheria prevention for the State Fair is being prepared by the chairman of the committee under the auspices of Indiana University. There is undoubtedly a great deal of interest in the campaign.

The committee is pleased to report that last year showed the lowest diphtheria death rate in the history of Indiana, and that the present year seems to be doing even better unless there is an unusual amount during the remainder of the year. This is unlikely, however, for the reason that the number of cases have been lower this summer than for several years. The great majority of the counties of the state have excellent records. A few counties, however, have had an unusual amount of disease. These counties owe it to themselves and to the remainder of the state to make a determined effort to clear up the situation.

The committee has a number of other plans which it would like to see put into operation with the further development of the work.

(Signed) DIPHTHERIA PREVENTION COMMITTEE,
 THURMAN B. RICE, Chairman,
 CHARLES S. BOSENBURY,
 ERNEST R. CARLO.

LIST OF PRESIDENTS OF THE INDIANA STATE MEDICAL ASSOCIATION SINCE ITS ORGANIZATION

| <i>Name and Residence</i> | <i>Elected</i> | <i>Served</i> |
|--|----------------|---------------|
| Livingston Dunlap, Indianapolis..... | 1849 | 1849 |
| William T. S. Cornett, Versailles..... | 1849 | 1850 |
| Asahel Clapp, New Albany..... | 1850 | 1851 |
| George W. Mears, Indianapolis..... | 1851 | 1852 |
| Jeremiah H. Brower, Lawrenceburg..... | 1852 | 1853 |
| Elizur H. Deming, Lafayette..... | 1853 | 1854 |
| Madison J. Bray, Evansville..... | 1854 | 1855 |
| William Lomax, Marion..... | 1855 | 1856 |
| Daniel Meeker, Laporte..... | 1856 | 1857 |
| Talbott Bullard, Indianapolis..... | 1857 | 1858 |
| Nathan Johnson, Cambridge City..... | 1858 | 1859 |
| David Hutchinson, Mooresville..... | 1859 | 1860 |
| Benjamin S. Woodworth, Fort Wayne..... | 1860 | 1861 |
| Theophilus Parvin, Indianapolis..... | 1861 | 1862 |
| James F. Hibberd, Richmond..... | 1862 | 1863 |
| John Sloan, New Albany..... | 1863 | 1864 |
| John Moffet (acting), Rushville..... | 1864 | 1864 |
| Samuel M. Linton, Columbus..... | 1864 | 1864 |
| Myron H. Harding, Lawrenceburg..... | 1865 | 1865 |
| Wilson Lockhart (acting), Danville..... | 1865 | 1866 |
| Vierling Kersey, Richmond..... | 1866 | 1867 |
| John S. Bobbs, Indianapolis..... | 1867 | 1868 |
| Nathaniel Field, Jeffersonville..... | 1868 | 1869 |
| George Sutton, Aurora..... | 1869 | 1870 |
| Robert N. Todd, Indianapolis..... | 1870 | 1871 |
| Henry P. Ayres, Fort Wayne..... | 1871 | 1872 |
| Joel Pennington, Milton..... | 1872 | 1873 |
| Isaac Casselberry, Evansville..... | 1873 | 1874 |
| Wilson Hobbs, Knightstown..... | 1873 | 1874 |
| Richard E. Haughton, Richmond..... | 1874 | 1875 |
| John H. Helm, Peru..... | 1875 | 1876 |
| Samuel S. Boyd, Dublin..... | 1876 | 1877 |
| Luther D. Waterman, Indianapolis..... | 1877 | 1878 |
| Louis Humphreys, South Bend..... | 1878 | 1878 |
| Benj. Newland (acting), Bedford (v.-p.)..... | 1878 | 1879 |
| Jacob R. Weist, Richmond..... | 1879 | 1880 |
| Thomas B. Harvey, Indianapolis..... | 1880 | 1881 |
| Marshall Sexton, Rushville..... | 1881 | 1882 |
| William H. Bell, Logansport..... | 1882 | 1883 |
| Samuel E. Munford, Princeton..... | 1883 | 1884 |
| James H. Woodburn, Indianapolis..... | 1884 | 1885 |
| James S. Gregg, Fort Wayne..... | 1885 | 1886 |
| General W. H. Kemper, Muncie..... | 1886 | 1887 |
| Samuel H. Charlton, Seymour..... | 1887 | 1888 |
| William H. Wishard, Indianapolis..... | 1888 | 1889 |
| James D. Gatch, Lawrenceburg..... | 1889 | 1890 |
| Gonsolvo C. Smythe, Greencastle..... | 1890 | 1891 |
| Edwin Walker, Evansville..... | 1891 | 1892 |
| George F. Beasley, Lafayette..... | 1892 | 1893 |
| Charles A. Daugherty, South Bend..... | 1893 | 1894 |
| Elijah S. Elder, Indianapolis..... | 1894 | 1895 |
| Charles S. Bond (acting), Richmond..... | 1894 | 1895 |
| Miles F. Porter, Fort Wayne..... | 1895 | 1896 |
| James H. Ford, Wabash..... | 1896 | 1897 |
| William N. Wishard, Indianapolis..... | 1897 | 1898 |
| John C. Sexton, Rushville..... | 1898 | 1899 |
| Walker Schell, Terre Haute..... | 1899 | 1900 |
| George W. McCaskey, Fort Wayne..... | 1900 | 1901 |
| Alembert W. Brayton, Indianapolis..... | 1901 | 1902 |
| John B. Berteling, South Bend..... | 1902 | 1903 |
| Jonas Stewart, Anderson..... | 1903 | 1904 |
| George T. MacCoy, Columbus..... | 1904 | 1905 |
| George H. Grant, Richmond..... | 1905 | 1906 |
| George J. Cook, Indianapolis..... | 1906 | 1907 |
| David C. Peyton, Jeffersonville..... | 1907 | 1908 |
| George D. Kahlo, French Lick..... | 1908 | 1909 |
| Thomas C. Kennedy, Shelbyville..... | 1909 | 1910 |
| Frederic C. Heath, Indianapolis..... | 1910 | 1911 |
| William F. Howat, Hammond..... | 1911 | 1912 |
| A. C. Kimberlin, Indianapolis..... | 1912 | 1913 |
| John P. Salb, Jasper..... | 1913 | 1914 |
| Frank B. Wynn, Indianapolis..... | 1914 | 1915 |
| George F. Keiper, Lafayette..... | 1915 | 1916 |

| | | |
|---|------|------|
| John H. Oliver, Indianapolis..... | 1916 | 1917 |
| Joseph Rilus Eastman, Indianapolis..... | 1917 | 1918 |
| William H. Stemm, North Vernon..... | 1918 | 1919 |
| Charles H. McCully, Logansport..... | 1919 | 1920 |
| David Ross, Indianapolis..... | 1920 | 1921 |
| William R. Davidson, Evansville..... | 1921 | 1922 |
| Charles H. Good, Huntington..... | 1922 | 1923 |
| Samuel E. Earp, Indianapolis..... | 1923 | 1924 |
| E. M. Shanklin, Hammond..... | 1924 | 1925 |
| C. N. Combs, Terre Haute..... | 1925 | 1926 |
| Frank W. Cregor, Indianapolis..... | 1926 | 1927 |
| George R. Daniels, Marion..... | 1927 | 1928 |
| Charles E. Gillespie, Seymour..... | 1928 | 1929 |
| Angus C. McDonald, Indianapolis..... | 1929 | 1930 |

EXHIBITORS AT FORT WAYNE SESSION

SEPTEMBER 24, 25, 26, 1930

- A. S. ALOE COMPANY, St. Louis, Missouri.
THE AMERICAN SCHOOL OF HONESTY, Fort Wayne, Indiana.
WM. H. ARMSTRONG COMPANY, Indianapolis, Indiana.
CAMERON'S SURGICAL SPECIALTY COMPANY, Chicago, Illinois.
COLUMBUS PHARMACAL COMPANY, Columbus, Ohio.
CURDOLAC FOOD COMPANY, Waukesha, Wisconsin.
R. B. DAVIS COMPANY, Hoboken, New Jersey.
DEPUY MANUFACTURING COMPANY, Warsaw, Indiana.
FOSTER & MESSICK, Managers U. S. Fidelity & Guaranty Co., Indianapolis, Indiana.
GENERAL ELECTRIC X-RAY CORPORATION, Chicago, Illinois.
GERBER PRODUCTS DIVISION, Fremont Canning Company, Fremont, Michigan.
HOOSIER PHARMACAL COMPANY, Indianapolis, Indiana.
HORLICK'S MALTED MILK CO., Racine, Wisconsin.
INDIANA PHARMACEUTICAL ASSOCIATION.
K AND W RUBBER COMPANY, Delaware, Ohio.
THE KELLOGG COMPANY, Battle Creek, Michigan.
THE LABORATORY PRODUCTS CO., Cleveland, Ohio.
MEAD, JOHNSON & COMPANY, Evansville, Indiana.
MEDICAL PROTECTIVE COMPANY OF FORT WAYNE, Chicago, Illinois.
MELLIN'S FOOD COMPANY, Boston, Massachusetts.
MERCK & COMPANY, Inc., Rahway, New Jersey.
PETROLAGAR LABORATORIES, Inc., Chicago, Illinois.
THE PHYSICIANS AND LAITY SERVICE, Richmond, Ind.
PITMAN-MOORE COMPANY, Indianapolis, Indiana.
W. B. SAUNDERS COMPANY, Philadelphia, Pennsylvania.
G. D. SEARLE & COMPANY, Chicago, Illinois.
SWAN-MYERS COMPANY, Indianapolis, Indiana.
TAILBY-NASON COMPANY, Boston, Massachusetts.
WAYNE PHARMACAL COMPANY, Fort Wayne, Indiana.
WHITE-HAINES OPTICAL CO., Columbus, Ohio.
MAX WOCHER & SON COMPANY, Cincinnati, Ohio.
THE ZEMMER COMPANY, Pittsburgh, Pennsylvania.

THE Association was wise in employing an attorney, Albert Stump, of Indianapolis, who has been serving us, and at all times has been accommodating, courteous, and capable in giving advice and counsel concerning all questions submitted to him. He is conducting a department in THE JOURNAL in which he answers any and all questions pertaining to the physician's rights and privileges under the law, when asked to do so. While Mr. Stump receives modest compensation for his work, yet we believe that a vote of thanks by the House of Delegates is due him for his fine cooperation and assistance.

THE JOURNAL*of the***Indiana State Medical Association**

Devoted to the Interests of the Medical Profession of Indiana

ALBERT E. BULSON, M.D., Editor and Manager

Office of Publication, 406 W. Berry St., Fort Wayne, Ind.

SEPTEMBER, 1930

EDITORIALS**OUR PRESIDENT**

The president of the Indiana State Medical Association, serving at the session to be held in Fort Wayne, September 24, 25 and 26, is Angus C. McDonald, surgeon, of Warsaw, Indiana. Doctor McDonald was born in Prince Edward Island, Canada, January 20, 1865. He was educated in the public schools and Prince of Wales College in that province. He taught in the public schools of Canada from 1884 to 1889. His medical education was received in the medical department of the University of Pennsylvania, from which school he graduated in the honor list in 1892. He was appointed interne to the Philadelphia General Hospital in competitive examination following graduation. He began practice in Warsaw, Indiana, in 1893, where he has resided and practiced since that time. He did post-graduate work in Philadelphia in 1897, in Chicago in 1902, and in Vienna in 1913. Early in his professional career he adopted surgery as a specialty, and he is known through northern Indiana as a surgeon of skill, experience and good judgment. He established the McDonald Hospital in 1911, and in 1915 the Warsaw clinic in connection with the hospital. With some changes the clinic has functioned since its founding, and throughout its entire existence he has acted as surgeon and consultant to both clinic and hospital. He has served as the president of the Boys' Club of Warsaw since its founding. At present he is president of the Anti-Tuberculosis Society of the county. He is the local surgeon for the Pennsylvania and New York Central railroads. He belongs to the Masonic orders, and is a trustee of the Presbyterian Church of his own city. He was elected president of the Indiana State Medical Association in 1928 to serve at the Fort Wayne session in 1930.

SURGICAL OPERATIONS ON INDIVIDUALS WITH DAMAGED HEARTS

It is a common belief, entertained both by the public and a considerable number of physicians, that a sudden operative death is due to heart failure, probably caused by the anesthetic. The most frequently expressed apprehension by indi-

viduals contemplating surgical operations is fear of heart failure, and anesthetists appear to direct all their preoperative scrutiny to the patient's heart.

The facts would *not* seem to warrant fear of cardiac failure by individuals who have damaged hearts and must undergo a surgical operation, except perhaps those who are victims of coronary occlusion. Of the many different varieties of cardiac pathology, including valvular and muscle disease, those with coronary occlusion seem to be the only type in which the mortality rate in surgical operations is increased definitely. This is a desperate condition with a high mortality whether associated with a surgical operation or not.

In a recent article by Butler, Feeney and Levine, appearing in the *Journal of A. M. A.*, 414 cardiacs who had been operated for various conditions had been studied. In estimating the mortality rate the authors divided the deaths in two classes, the unexpected and the inevitable. By unexpected deaths is meant a death that probably would not have occurred had no operation been done. Inevitable deaths were recorded when death took place following operation in those cases that were regarded as inevitably fatal regardless of operative procedures. These deaths were not included in estimating mortality rates, and it seems reasonable to exclude them.

The following interesting facts were deduced from a study of these cases: There were 494 operations done on 414 patients. In the entire group there were 28 unexpected deaths or a mortality rate of 6.3 percent. The various cardiovascular diseases were grouped and gave the following mortality rates: Valvular heart disease, 2.1 percent; chronic myocarditis, 4.9 percent; auricular fibrillation, 3 percent; angina pectoris, 7.7 percent; coronary thrombosis, 44.5 percent; paroxysmal tachycardia, no deaths; congestive heart failure, 17.1 percent.

While these figures do not give an accurate picture of the operative risk of one group as compared to another group in cardio-vascular diseases, for the reason that it does not take into consideration the type of operation performed, yet sufficient numbers of factors are common to all the operations to make it a fair estimate. It is obvious, of course, if all the anginal group had been acute intestinal obstructions the rate would have been much higher than 7.7 percent.

This kind of a study is extremely valuable, for it offers definite proof of the safety of operation when indicated in individuals who have damaged hearts. Recently opportunity was offered to observe a patient with a toxic goiter who had a badly damaged heart. This patient was suffering from congestive heart failure when she entered the hospital: mitral leak, enlarged left heart, dyspnea to the point of inability to lie down, edematous feet, moist rales, pink sputum; B.M.R. plus 72, pulse rate 120. This picture improved

slightly following three weeks in bed, and digitalis, at which time a bilateral resection of thyroid was done under sodium amytal and gas anesthesia. There was no marked postoperative cardiac disturbance.

THE EXPERT MEDICAL WITNESS

The absurdity of expert medical testimony and the serious menace to the confidence of the public in the honesty and integrity of medical opinion was illustrated strikingly in a civil suit recently tried in one of our Indiana courts. The question at issue was the competency of the testator to make a will, this being contested by the plaintiff on the ground of unsoundness of mind. In addition to the medical testimony of the attending physician who had been the personal physician of the testator for six or eight years prior to her death, three experts appeared as witnesses. These gentlemen, of course, had never seen the testator and were in possession of no facts bearing on the question of her sanity, except as were obtained from a hospital record, and such other data bearing on the question as could be obtained from any source available. With such meager facts at hand these experts, prior to the trial, with their respective attorneys, draft long hypothetical questions. At the trial each attorney then proceeds to read these long hypothetical questions, and his expert, who might be termed the "yes-man," gives the desired answer. It is not surprising that one of the attorneys should remark, in the course of argument on a motion before the court, and with the evident approval of all who heard, "You can get a doctor to say anything."

Such a direct impeachment of the honesty of the medical profession is invited every time expert witnesses permit themselves to be a party to the farce of an hypothetical question. At its best this type of evidence is untrustworthy, and at its worst little better than perjury at a price. That the medical profession should continue to lend itself to such abuses is unthinkable. We cannot build public confidence as long as it is possible for an attorney in open court to say, "You can get a doctor to say anything." A movement is now under way for holding a constitutional convention in Indiana. If such a movement should succeed, every effort should be made to correct the abuses of expert medical testimony, not only in the interests of the rights of litigants, but to remove a source of public suspicion.

THE ALL-TIME HEALTH OFFICER

We hope that none of the readers of THE JOURNAL have misconstrued our attitude concerning the all-time public health officer after reading the editorial comment concerning the matter in the August number of THE JOURNAL. It should be noted that we quoted Secretary King throughout, though we concluded by saying that we hoped that at the next session of our Association some

action would be taken in support of a movement to *keep the health matters of the State in the hands of medical men*. We reiterate that statement, for it should be known that all of the health officers of the State are *not* medical men, and some of the health officers, even though medical men, are not truly representative. Furthermore, in many of the counties of the State the public health nurses loom larger in the field of public health work and preventive medicine than do any of the medical men, even those who have the title of health officer. In more than one community the public health nurse is a thorn in the flesh of the medical men of the community. Some health nurses pretend to know much about medicine and surgery and are exceedingly officious in offering suggestions or advice, oftentimes contrary to that offered by reputable physicians, and in the end creating friction and disrespect of physicians by laymen.

Theoretically we are inclined to agree with Dr. King that the all-time health officer if qualified and following ideas advanced by the leaders in public health work, would prove valuable. However, we never have and never will have capable and efficient all-time health officers under salaries that most of the municipalities, districts or counties can afford to pay. Public health officers at present are dabbling in politics more or less, but they will be dabbling in politics still more when positions and salaries depend upon political activity. In fact, we predict that if the all-time health officer prevails in all communities he will be less competent than the public health officers selected according to our present plan. There are any number of ne'er-do-well physicians, illy trained and poorly equipped in every way for medical work, who would jump at the chance to get a berth at even a modest salary, and undoubtedly would be able to secure the position inasmuch as so many of those men, with little else to do, are playing politics most of the time.

Last but not least, we desire to call attention to the fact that if we ever get state medicine, the public health officers will be the ones who will boost the thing along and be most active in controlling the situation inasmuch as they already are on the job. Secretary King attempts to point out that the all-time health officer has been a great success in certain localities, but he doesn't say anything about the progress of state medicine in those same localities, and if he did that might prove interesting reading if facts were given. We know of several all-time public health officers who not only are strong for state medicine, and openly express themselves in that matter, but are distinctly antagonistic to many of the ideas of the medical profession. Even in Indiana we have some health officers who are advocating free clinics under state or municipal control, and not a few of them have other socialistic tendencies. In Indiana what could be better as a stepping stone to state medicine than the free service in the state

hospitals and the state laboratory, the correction of the abuses of which has received only half-hearted action on the part of those who control the service, though we willingly admit that the medical profession is equally guilty in not urging and joining in a vigorous effort to correct such abuses. A lot of these socialistic ideas that are rampant today sound well but they fail when put into practice. Theoretically the all-time health officer offers a solution of many problems pertaining to public health and sanitation, but practically we doubt if it will work out satisfactorily. We deny that Indiana is backward in public health matters, for the medical profession, even in a very large way through our Bureau of Publicity, has done an immense amount of good in educating people concerning public health, and we are firmly convinced that the medical profession, unaided by a lot of public officials, can do much more than we are doing under our present system. In fact, we believe that much of the socializing attitude of philanthropists and laymen is inspired more by public health officers than any one else, and it is time for the medical profession to be more awake in the future than it has been in the past in keeping health matters in the hands of medical men who are bound up in the traditions of the medical profession and not interested in politics. We can do this if the three thousand or more reputable physicians of the State of Indiana, aided by their friends, will unite as a single unit in support of our state public health department as now conducted, and in the preservation of present ideals of professional practice.

GIVE CREDIT WHERE DUE

We believe that there are very few members of the Indiana State Medical Association who know about and appreciate the value of the large amount of time, thought and effort put upon constructive work in the interests of the medical profession and public. How many readers of *THE JOURNAL* know that the Bureau of Publicity works many hours out of every week in discussing publicity problems and preparing articles for the public press that are constructive and trustworthy concerning health problems? The men connected with the Bureau give of their time and talent in this work without hope of reward of any kind except the self-consciousness of doing something worth while. Every member of the Bureau deserves more praise than he ever will receive for the service that he is rendering, but we have singled out Dr. W. N. Wishard for a word of appreciation largely because for over fifty years he has been an indefatigable worker and leader in work for the benefit of medical profession and public alike in all that pertains to public health, medical legislation, medical education and medical practice. For more than forty years Doctor Wishard has been either a member of or chairman of one or more important committees of our State

Medical Association, and throughout that entire period he has been unselfish and liberal in giving service. It has been to his everlasting credit that, despite the fact that many years ago we honored him with the presidency of our Association, he has continued up to the present moment, though he is nearly eighty years of age, to give of his time, energy and thought to constructive work, of which the exacting and strenuous work as a member of the Bureau of Publicity is a striking example. We call attention to this matter because we think that the rank and file of the members of our Association do not realize how much is being done directly or indirectly in their interests by many medical men as officers or as members of important bureaus or committees, and always with the one thought of doing justice to the profession and public. There are, of course, carping critics who always have and always will discredit and depreciate the services of the really big men of our profession who are working for something more than the honor afforded by an official position, and whose attitude is best indicated by the fact that they continue to serve long after their confreres have bestowed all the honor that can be bestowed, as in the case of Doctor Wishard. The point to be emphasized is that we should recognize the value of the services rendered by the old wheel-horses who have helped to make the practice of medicine what it is today, and we should be a little more generous in our support and not be so ready to take things for granted, or be led astray by the jealousies and petty contentions of those who are incapable of placing a proper estimate upon the good things of life. We need the services, advice and influence of the men in our profession who possess integrity, ability and constructive thought. They should be encouraged to serve, and their unselfish efforts duly recognized. We speak in the interests of the officers of our Association, but in particular in the interests of members of bureaus or committees, for the work oftentimes is onerous and too often thankless.

BABY SHOWS

Two or three times during the last few years we have had occasion to comment unfavorably concerning the so-called "baby shows" or baby clinics conducted under the auspices of health officers and commercial enterprises, and participated in by physicians whom we charitably believe to have been inveigled into serving in connection with the exhibition. We always have felt, and still feel, that these baby shows serve no useful purpose and are little better than exhibitions where fond mothers may present their offspring in competition as to physical fitness or from curiosity to know what will be said about them by a committee of physicians following a casual and superficial examination.

We note that the Bureau of Publicity of the

Indiana State Medical Association (see report in this number of *THE JOURNAL*) entertains the same opinion concerning baby shows or clinics that we do, for in considering the attitude which members of our medical association should take toward clinics the Bureau says that so-called baby clinics and publicity stunts by individual physicians or local or state health officers are most objectionable, and not only are of little or no scientific value but lead to objectionable personal prominence of individual physicians and health officers conducting them. The examinations usually are very superficial and sometimes bring about very untrustworthy advice. Their educational value to the public generally is limited to an emotional appeal, and the reaction is usually transient and misleading in its effect upon the public.

It is our candid opinion that the physicians who donate their services to these baby clinics, particularly the clinics held in connection with state or county fairs, bazaars, and as an advertising feature for certain newspapers, are engaging in the work as a publicity stunt to exploit themselves, and accordingly we quite agree with the Bureau of Publicity that it is objectionable from an ethical standpoint and of little or no value to the public.

THE MEDICAL SOCIETY AS A BUSINESS ORGANIZATION

Dr. M. L. Harris, the retiring president of the American Medical Association, for several years has been advocating the adoption of business principles on the part of medical men in furnishing medical and surgical care for all the people, all the time, for compensation that is in keeping with the ability of the individual patron. He comprehensively discussed this subject in his address at the Detroit session, and urged local medical societies to organize as business enterprises to carry out the proposed program. It is his idea that any county medical society can operate as a unit in caring for the people of the community, by offering adequate medical and surgical attention to all, so that no one will be slighted but each pay his rightful share in the cost of the service. It is expected that the indigent and the very poor will be cared for by the community, just as food, clothing and shelter are provided by the community for those who cannot procure such necessities in any other way.

The proposition sounds good, and it can be carried out if every member of the county medical society will join whole-heartedly in the plan and do his part toward making the enterprise function in a satisfactory way. However, we are firmly of the opinion that as a business organization the county medical society will be a flat failure unless it is managed and guided by someone with good business judgment, and as a general thing that means selecting a layman. In other words, the

details of organization and management will have to be worked out by a layman with broad vision and good executive judgment. Certainly the time is ripe for some sort of economic change in the methods employed by medical men in caring for the sick of their several communities. It is the haphazard manner in which medical practice is now carried on that has prompted laymen to suggest unification of medical service through state medicine, or community clinics under the management and control of philanthropic organizations.

What is needed right now is more unification of the medical profession, and sympathetic cooperation of all medical men in settling the economic problems that confront us. This means doing away with selfishness, jealousies, and carping criticism which today keeps medical men in more than one community working at cross purposes. This is no time to procrastinate, for imperative action is required if we are to prevent the adoption of state medicine or its equivalent, with all of the detrimental features that go with the operation of such a scheme. State medicine has spelled misfortune for medical profession and public alike in the countries where it has been tried. For years medical men of this country have been apathetic concerning the progress of this menace, and, while we think it is late to adopt preventive measures, yet it is possible, through united effort, to minimize the evils of socialized medicine, even if we can't prevent it altogether.

When the county medical society organizes as a business enterprise to furnish medical service to all it should organize for the purpose of furnishing telephone, collection and nursing service. It also can be a clearing house for the purchase of drugs and surgical equipment for its members and to furnish other service that can be rendered better and cheaper than the same service can be obtained by the individual. Therefore, there is much to say in defense of the Harris plan because it may be expanded to serve so many purposes.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely free to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in *THE JOURNAL*, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask *THE JOURNAL* about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want *THE JOURNAL* to serve you.

THE Time: Wednesday, Thursday and Friday, September 24th, 25th and 26th.

The Place: Fort Wayne, Indiana.

The Event: The annual session of the Indiana State Medical Association.

As a model medical society secretary's report we refer medical society officers to the report of the Fort Wayne (Allen County) Medical Society by Secretary L. P. Harshman, as printed in the Society Proceedings Department in this issue of THE JOURNAL.

THE A. M. A. has a membership of over 100,000 reputable physicians. What a power that number of men could be if concentrated upon any enterprise, and in particular upon efforts to protect the people as well as the medical profession from socialized medicine, with all of its viciousness as exemplified in several European countries that have adopted it.

MEDICAL charity should be bestowed upon those who need it, but it is an obligation that belongs to the community and not to individual physicians. The city or township should see to it that its impecunious sick receive medical attention at public expense—not shift the burden to a small group of philanthropic doctors. —*Compend of Medicine and Surgery*, February, 1930.

THERE will be a fine lot of commercial exhibitors at the Fort Wayne session. Don't fail to see their displays and talk to the representatives. It is an educational feature, and as a side issue we may say that it is a profitable feature for the Association, for the exhibitors are paying for the privilege of meeting with us.

THE president of the Indiana State Medical Association for this year, Dr. A. C. McDonald, of Warsaw, has been very active in looking after the interests of the Association. He not only has visited many districts and county medical associations but has been faithful in attendance at many meetings of the Council, executive and other committees of the Association.

AGAIN we desire to speak a good word for our advertisers, for it is they who materially help to make THE JOURNAL what it is today. However, the first interest of advertisers is to get not only the good will but the *patronage* of the readers of THE JOURNAL, so please give them your consistent

co-operation by answering their advertising and patronizing them whenever possible.

WE hope that every reader of THE JOURNAL will read carefully the reports of the officers and committees of the Association as published in this number of THE JOURNAL. They offer recommendations, thought out carefully, which should receive serious attention on the part of the House of Delegates. We especially commend the committees for the excellent work that has been done.

EVERY member of the Association should read the committee reports published in this number of THE JOURNAL, but we especially desire to call attention to the report of the Bureau of Publicity which contains some valuable information and sound advice. A number of pertinent questions concerning medical practice have been asked by various members and answered in a judicial but appropriate manner.

**Do Not Miss
THE PUBLIC MEETING
Thursday, September 25th
SHRINE AUDITORIUM
8:15 P. M.**

All physicians and their wives are expected to attend this meeting. You will want to be there on time when you know that the principal speakers are—

MORRIS FISHBEIN, M.D., editor of the *Journal of the American Medical Association*, a "peppy" talker; and

ARTHUR J. CRAMP, M.D., head of the Bureau of Investigation of the American Medical Association, also an interesting talker.

THE *Journal of the A. M. A.* has a circulation of over 96,000. Well, what of it? It has earned such a circulation, for it is the largest and best medical journal in the world, and any physician who is not a subscriber to that journal is denying himself one of the best means of keeping himself abreast of the times. To tell the truth he cannot afford to be without that journal and the official journal

of his own state medical association.

THE question of giving the State Board of Health representation in the House of Delegates of the Indiana State Medical Association must be settled by an amendment to the Constitution. The Council has made provisions for such an amendment to be presented at the Fort Wayne session. The representative from the Board of Health must be a regular physician and a member in good standing of the Indiana State Medical Association.

MANY of the better class dentists now are sending their patrons nicely engraved cards calling attention to the fact that it is time to have the teeth given their regular inspection. As a rule people like to be reminded concerning the time when the teeth should be examined with a view

to preventing trouble and giving any appropriate attention. Perhaps the patrons of physicians would appreciate being notified that it is time for a physical check-up.

STILL they come! More and more letters from Indiana physicians telling how they have been swindled or imposed upon by insurance companies and collection agencies. For years THE JOURNAL has warned its readers not to patronize insurance companies or collection agencies unless the trustworthiness of such concerns could be established. We have begun to think that not only is the average physician stupid when it comes to business affairs, but he positively will not learn.

THROUGHOUT the year there has been much work accomplished by the various representatives of activities of the Association, and it is a fine thing for the Association to have so much interest and co-operation on the part of officers and members. Usually one or two men have to do all the work, but this year many have helped out, and that speaks well for the growing interest in our Association and the valuable work it is performing for the benefit of the profession and public.

WE are pleased to know that *Hygeia*, the popular health magazine issued by the American Medical Association, now has a circulation of over 75,000. Approximately seventy percent of this circulation goes to laymen, and thirty percent to physicians. The Board of Trustees of the A. M. A. has appealed to the physicians of the country for their whole-hearted support of *Hygeia*, and requests that a copy of *Hygeia* be found upon the table in the waiting room of every reputable physician.

IT is hoped that many of the members of our Association attending the Fort Wayne Session will arrange to come a little bit early and participate in the health officers' conference which is to be held in Fort Wayne immediately preceding the annual session of our Association. Secretary King plans for a public meeting on Tuesday evening, September 22nd, open to doctors and to the public. Talks will be given by prominent men, notably Surgeon A. J. McLaughlin of the U. S. Public Health Service who will deliver the principal address.

THE sale of mechanical exercisers to the public is condemned by the Council on Physical Therapy of the American Medical Association, and for the following reasons: First, volitional effort is not encouraged; second, the same results could be accomplished without an apparatus; third, treating only one part does not give any of the advantages of general exercise; fourth, the use of such

apparatus is monotonous and the patient loses interest in treatment; fifth, the effect is that of massage and lacks the physiologic benefits of exercise; sixth, such apparatus is definitely dangerous.

WE haven't noticed that any Indiana county medical societies have adopted the recommendation of the American Medical Association that component county medical societies should incorporate and establish medical centers owned, controlled and managed by the members of these societies where all classes of persons who are unable to pay regular fees can be given the highest type of medical treatment at prices within their means. It is too bad to disturb the sleep of the Indiana physicians, but someone must put a charge of dynamite under them to get them to act in their own behalf.

THE National Smoke Abatement Society of London has published a lecture on smoke and health, and as quoted in the *Journal of the A. M. A.* of June 21, 1930, says that "there is evidence that smoke is a factor in the production of thoracic cancer." It is shown that the prevalence of cancer is higher in places where the atmosphere is smoke laden. This is explained by the fact that tars and mineral oils have been shown to produce cancer. Studies of this kind in the smoke-laden atmosphere of several of the cities in this country ought to be instructive. Pittsburgh isn't the only city that offers a fertile field for investigation.

A REGULAR correspondent of the *Journal of the A. M. A.* residing in South America says that fee-splitting is rampant in Buenos Aires. It is said that the practice is indulged in by surgeons, laboratories, pharmacists, and manufacturers of mechano-therapy apparatus. The better class of physicians in Buenos Aires are protesting against such practices which they claim mar the ethical level of the medical profession. It will require some sort of revolutionary activity to stop the practice. Thus it will be seen that the United States is not the only place where the practice of medicine is assuming the aspects of a trade rather than a profession.

IN England the law makes it a misdemeanor to annoy residents by unnecessary noise. Perhaps it is too much to expect any action along this line here in the United States, for we have less respect for law than they have in England, but it would be a blessing to sick and well if we could suppress unnecessary noise, and we have in mind the fiend who has his radio or phonograph near an open window and insists upon keeping his neighbors disturbed at hours when decent people are asleep, and the automobile drivers who take a special delight in running with the exhaust open and tooting the horn viciously at all hours after midnight.

THE Council on Physical Therapy of the A. M. A. is attempting to discourage the sale of harmful and useless physical therapy apparatus advertised to the public for the purpose of self-treatment. The effort has met with considerable success, and the better class of manufacturers have cooperated. Physical therapy apparatus has been the means of considerable swindling of the public, and even some physicians have fallen for the specious claims put out by manufacturers, and generally because the claim has been made that physicians can increase their income through the fees charged for physical therapy treatment whether such treatment is indicated or not.

THE *Journal of the A. M. A.* and all of the state medical journals have come in for severe criticism and abuse at the hands of Ambruster, chief instigator of the ergot controversy, and all because those official medical journals refuse to believe all of the accusations made concerning the honesty of intent and purpose of the leading pharmaceutical houses of this country in their manufacture and marketing of ergot preparations. It would be passing strange if all the medical journals and all of the many reputable pharmaceutical houses could be all wrong concerning the trustworthiness of the ergot preparations now found on the market, and Ambruster, admittedly trying to corner the ergot market, could be the only one who is right.

It may be interesting to the general run of physicians to know that the A. M. A. supports a large number of activities that are operated in the interests of medical profession and public alike. Thus, during the past year the expenditures upon councils, bureaus and other departments of the A. M. A. were in excess of \$280,000. This was all in addition to the cost of publication of special journals, the A. M. A. directory, the *Journal of the A. M. A.*, and the expenses involved in the conduct of the association business. It is a source of amazement to any physician who visits the A. M. A. headquarters in Chicago to note how much and how varied the work is that is carried on by the American Medical Association. It will pay any member to visit the A. M. A. building for a day when convenient.

At last we are to have a standardized fever thermometer if a resolution passed at the Detroit session of the A. M. A. is followed. The U. S. Bureau of Standards is asked to formulate a method whereby thermometers will be checked by the Bureau's standards, and suitable penalties will be provided by law for violation of such standards by manufacturers. Perhaps there will be bootlegging of thermometers, and if so it is our guess that some physicians who always are looking for the cheapest things with which to do their

work will try the bootleg thermometers. Representatives of instrument firms have told us many times that some of their patrons will buy cheap and inferior thermometers, just as they buy cheap and inferior drugs and instruments, rather than pay a little more for a standardized quality.

WE have a Constitution and By-laws. Why not abide by the provisions that have been enacted into the law of the Association? Heretofore some hasty and unconstitutional actions have been taken, and it is time to call a halt. It would be an extremely wise action if the House of Delegates would select a Speaker, as does the American Medical Association, whose duty it would be to preside at the meetings of the House of Delegates and conduct them in accordance with the rules of order, and especially in accordance with our Constitution and By-laws with which the Speaker is supposed to be very familiar. No doubt every president would appreciate being relieved of the responsibility of presiding at meetings of the House of Delegates, for parliamentary usage with which the president may not be familiar should prevail.

WE are much interested in hearing through a credit-rating bureau that as a general proposition members of the medical profession have very poor credit, in that they do not pay their bills promptly and some of them, even prominent in the profession, have stars after their names indicating that it is wise for the merchant to demand cash in advance when selling such physicians. All of which indicates that medical men should do less complaining about poor collections and deadbeat patrons. The physician who keeps up his personal credit, even borrowing at the bank to pay the merchant or the laborer, can with good grace be a little insistent upon the prompt payment of bills for professional services rendered by him, but if he doesn't keep up his own credit it comes with poor grace for him to kick about failure on the part of his patients to keep up their credit.

It is worth while for anyone to establish good credit. This applies to physicians as well as others. It is not a bad idea to invest surplus funds in good securities, so recognized by a bank, and in that way always have something that may be used in emergency for the prompt raising of funds. The physician who discounts his bills on the tenth of the month may be a rare kind of bird, but he has the satisfaction of knowing that his credit is unquestioned and his standing in the community increased. Perhaps when the first of the month rolls around and the bills for groceries, clothing, rent and equipment come in he may not have ready cash to pay them, but if his credit is good he can borrow the money at the bank and actually make money by taking the cash

discount of his creditors. It is the business of the bank to loan money, and it is better for anyone to owe a bank than to owe a merchant.

THE Committee on Scientific and Industrial Relations is doing a splendid work in the interest of the individual physicians of the State who may have controversies with insurance companies as well as the industrial board concerning compensation in industrial cases. At the present time the committee is looking into the question of putting a stop to the impositions practiced by those who are injured in automobile accidents, who accept the services of physicians and hospitals and then neglect to pay for such services, even though they receive handsome compensation at the hands of insurance companies, or are otherwise amply able to pay for the service. Perhaps there may be some way by which a hold may be placed upon these "spongers" through suitable legislation. We are approaching another session of the Indiana legislature and it might be well to consider carefully the question of securing suitable laws governing the matter.

THE dues to our State Medical Association are seven dollars per year. Some members think that the dues are too high, but for the most part the membership of the Association is satisfied with not only the amount of the dues but with what has been accomplished with the money. Most of the state medical associations comparable to ours have dues anywhere from ten to fifty dollars per year, and there has been no falling off in membership in those states in consequence of the amount paid as dues. Minnesota has dues of fifteen dollars per year, and in answering a few complaints and to quiet the agitation for some reduction in the dues, *Minnesota Medicine* winds up by saying, "The whole question is whether we are to continue being an organization which with various agencies join to make its influence felt, or whether the state association is to revert back to its former condition of innocuous desuetude." Well said, brother!

AGAIN we desire to call attention to the discretion that should be used in taking advantage of the offer of various commercial houses to furnish so-called educational moving picture films to be used before county medical societies. Most of such films are at their best mildly commercialistic. Occasionally the films are really instructive as well as entertaining, and well worth an evening on the part of any medical society, though the difficulty arises in separating, figuratively speaking, the sheep from the goats. On the other hand, there are societies, institutions and organizations, notably the American College of Surgeons, that have prepared moving picture films that may be employed by any society with assurance that they

not only are as represented but well worthy of presentation on any medical program. They also have the distinction of being thoroughly devoid of the slightest taint of commercialism.

THE Indiana State Medical Association well can follow the example of the A. M. A. in deciding that all of the expenses of an annual convention shall be borne by the Association and none of the expense, even entertainment, shall be borne by the local profession. Of course it is expected that local medical men will give assistance through proper committees or individuals, in providing suitable hotel accommodations, meeting places, exhibit space, and information. It is too much of a drain upon the local profession to provide entertainment for the visitors, for as a usual thing the bulk of this expense is borne by a limited number and there is no reason why the local profession as a profession should be expected to furnish special entertainment for from five to eight hundred visitors. The A. M. A. has adopted a resolution in keeping with this idea, and the example could be followed by state associations.

A LARGE program has been crowded into the two days' session of our Association to be held in Fort Wayne on September 24th and 25th. Starting with a golf tournament on Wednesday morning at 7:30, and ending with the public meeting on Thursday night, September 25th, there isn't an idle moment for those who take part in all of the activities of the Association that are planned for the session. The scientific papers and addresses promise to be of unusual excellence, and there will be splendid entertainment by the local profession. There will be dinners, luncheons, a theater party, golf, sight-seeing trips, and in fact, everything but beer and pretzels, and who knows but what someone may even offer the latter in spite of our chaste but not very greatly respected prohibition laws? Anyway, come early and stay late. We hope that no one attending the Fort Wayne session will go away disappointed.

THE Pennsylvania State Medical Association has a benevolent fund which now amounts to sixty-one thousand dollars. The income from this is used for the benefit of physicians of advanced age whose income is inadequate to provide the ordinary necessities of life. It is intended to broaden the scope of the function of the fund so that it will furnish relief of pecuniary distress for sick or aged members or the parents, widows, widowers or children of deceased members.

It often has occurred to us that state medical associations could do something handsome for members if provision were made for group insurance, such insurance to be operated during the life of any reputable physician who has kept up his membership in his regular medical society. We believe that every physician who analyzes the

proposition carefully would be willing to pay increased dues if he knew that a portion of those dues would be set aside to pay for a group insurance policy that could be so worded that it would take care of a physician or his dependents in old age.

THE director of scientific work for the United States Department of Agriculture has issued a public bulletin which ought to set at rest the unfounded criticism of food faddists concerning the value of white bread as an article of diet. He says: "White and whole wheat breads are both wholesome foods. They are among the most important and chiefest sources of energy and protein in the diet. Bread, either from white or whole wheat, is always an economical source of energy and protein at any time. The form may be left to the choice of the individual when the remainder of the diet is so constituted as to contribute the necessary minerals and vitamins and any necessary roughage. Almost all dietitians nowadays recommend a varied diet. The American people have available from the farms, ranches and fisheries everything needed for producing a sound body. Those who give out information on food values should be particularly careful not to draw unwarranted conclusions as to food values based on the presence or absence of some particular factor."

A CORRESPONDENT writes us to the effect that some of his confreres are prescribing worthless or near-worthless proprietary remedies some of which can be bought in department stores and from mail-order houses. This comment was brought forth by reading an editorial note in *THE JOURNAL* to the effect that the members of the Indiana State Medical Association ought to prescribe U. S. P. or Council-accepted products only and of trustworthy make. Our correspondent very aptly says, "Why will supposedly reputable physicians be such damned fools as to prescribe drugs and pharmaceuticals about which they know absolutely nothing except what is told them by the manufacturers, who so often lie, and why do doctors who prescribe U. S. P. and Council-accepted remedies try to procure such products at the cheapest rate and without regard to quality of the product?"

It has been our experience that one gets just about what he pays for, and if a physician prescribes cheap drugs he generally gets drugs of poor quality. Reputable pharmaceutical houses, turning out trustworthy products, are charging no more than a reasonable profit demands.

Isn't it a peculiar trait of human nature that prompts a man to put aside everything for convenience and pleasure and to be inconsistent and positively nasty when it comes to the exacting services of a physician? A physician friend of

ours was asked by a merchant to make an appointment for an examination at an hour that would have been inconvenient for most any physician, the excuse being that the merchant was so very busy looking after his mercantile business that he could not arrange to see his physician during regular hours. Later it was discovered that the merchant made a regular practice of devoting three afternoons a week to golf, and was so intent upon his pleasure that on those afternoons he took both his lunch and his evening meal at the country club. To the credit of the physician it may be said that a heart-to-heart talk with the merchant, with an explanation of the inconsistency of his demands in the face of the facts, caused the merchant to change his attitude. It is our opinion that the physician who permits himself to be imposed upon gains absolutely nothing in the end, inasmuch as the patient who finds that he can impose upon the physician generally is a very unsatisfactory patient. Practically everyone has more respect for reasonable independence of thought and action.

NOT much is said concerning the medical defense feature of our Association, but the members should know that the executive committee is doing a wonderful work in its endeavor to assist deserving members in malpractice litigation. Many members of the Association do not carry malpractice protection in any of the large insurance companies, even though we feel that in these grasping times a physician is justified in having all the protection he can get. Those members who have depended upon our Association for assisting in malpractice litigation have reason to be grateful for not only being assisted legally but in effecting an enormous saving in money. This malpractice service goes with membership in the Association, but again we desire to emphasize the necessity of being in good standing through the prompt payment of dues, for delinquents can not be served by the Association in malpractice litigation. It seems to be a peculiar twist of fate that some of the men who perhaps may be only a few days or a week or two delinquent in the payment of dues, are the very ones who are most apt to be hit by a malpractice suit, based upon services rendered while delinquent. A number of such instances are on record, and it should be a lesson to every member of the Association and a stimulus to avoid delinquency.

MANUFACTURERS of pharmaceutical specialties often do not accept the rulings and suggestions of the Council on Pharmacy and Chemistry of the American Medical Association in that cooperative spirit that should exist in the interests of public and profession alike, and some firms totally ignore the Council. Physicians should realize that the work of the Council is both constructive and protective and that the findings are thoroughly

unbiased as well as trustworthy. Before we had the Council the market was flooded with proprietaries that had little to recommend them except the statements of the manufacturers and promoters, oftentimes exaggerated and occasionally patently false. Today the more reputable and trustworthy manufacturers of pharmaceuticals and proprietaries are not only willing but anxious to cooperate with the Council in putting out products that are dependable from every standpoint. It would seem to us that every physician who desires to protect his own interests as well as the interests of his patient will follow the findings of the Council rather than the findings of some manufacturer who ignores the Council. The physician who prescribes Council-approved products is in a safer position than the one who prescribes products that are not Council-approved and have nothing to recommend them but the statements of the manufacturers, which statements often are exaggerated grossly and many times flagrantly deceptive.

ONE of the readers of THE JOURNAL residing in the western part of the state sends us a newspaper clipping in which a prominent physician's name is mentioned five times in connection with operations or treatment of patients, and once the name is in connection with the receipt of some new apparatus used for surgical work. Such self-exploitation in the newspapers is nauseating to members of the medical profession and public alike. Is it any wonder that in some county medical societies there is a lot of friction and ill feeling among the members? The physician whose name appears so frequently in newspapers in connection with cases or the procurement of new office equipment that is reputed to be the latest on the market and different from anything in the community, ought to be brought before his county medical society for an explanation, for it is dollars to doughnuts that he and he alone is responsible for a breach of medical ethics and common decency. We should discipline and penalize such offenders or agree that we will let down the bars and permit the members of our county medical societies to advertise like common quacks. As we said in a former editorial note, we are starting a scrap book, and we are going to file newspaper clippings such as the one just received. Some day we may publish a lot of these just as they appear in the lay press, and that will help along the advertising game.

A GREAT hue and cry is made concerning the cost of illness and what shall be done to relieve the sick poor. Philanthropists, some of whom have made their fortunes by stealing from labor, seem bent upon giving back to the people some of the ill-gotten gains, and they seem to think that medical charity is a fertile field for their contributions. A writer in the *Milwaukee Medical Times* analyzes the subject as follows: "No man, woman

or child need go without efficient medical service, regardless of price, but during the past winter many a man and many a woman and many children have felt the distress of unemployment, the pinch of poverty, the pangs of hunger, and so I suggest that better organized industries do away with periods of unemployment. When business puts its own house in order physicians, I have no doubt, will be more than willing to listen to any suggestions they have to make concerning a better organized medical profession, and will welcome any improvements that can be made in the interests of the sick. Better than charity is steady employment at adequate wages. A division of the profits with men who work and they will not need so much charity nor will they need coddling on the part of the government. The medical profession welcomes the gifts of the wealthy and applauds the donors, but these gifts are not fit substitutes for stabilized industry and steady employment."

THE *United States Naval Medical Bulletin* for April presents an interesting article on barbital, its uses and misuses, by Lieut. H. M. Walker, of the U. S. Navy. After showing that barbital is a very valuable drug in the treatment and prevention of acute cocaine intoxication, and that it has proved its worth as a preoperative sedative, he goes on to say that barbital and its derivatives have an increasing lay popularity for self-administration. Its habit-forming propensities are recognized sufficiently well to merit the term *barbitalism* or *veronalism*. Ethical offenses are well within the possibilities. The dulled sensorium may lead to cross-eyed criminal complacency with the schemes of others. Thus the hypnotic may become menacing to the public welfare. The author's interest in the subject has been increased by the observance of several cases of barbital poisoning. It is unfortunate that the drug is obtained easily from the druggist without prescription and in large quantities. The Naval hospitals frequently receive emergency cases of barbital poisoning. Those in need of sleep in the day time are particularly prone to take the drug. That a craving may be created is unquestioned. Cases are cited which illustrate the danger of permitting the drug to be obtained at random by the public. The solution of the problem lies in the restriction by law of the use of barbital. A medical prescription should be presented to the druggist each time before he is allowed to sell any to the laity. This step may prevent suicidal attempts and other improper uses and place responsibility upon the proper authority.

WILL ROGERS, in one of his weekly letters published in the lay press, says that physicians should charge a patient in proportion to ability to pay, and that the rich should be willing to pay enough to make up for the charity work done for the poor.

Ye gods! That is exactly what we try to do, but it doesn't work out very well in practice, for every physician knows that whenever he attempts to collect from his well-to-do patients just a trifle more than the ordinary fee he gets into a peck of trouble, and for the reason that with few exceptions the rich and well-to-do are a lot of "pikers" when it comes to paying a physician's bill. In Indiana we happen to know of a millionaire who was charged one thousand dollars by a surgeon who performed a very serious and technical abdominal operation upon the millionaire's wife. It was a complicated operation, and justified more than an ordinary fee even from people in moderate circumstances. The after-attention was prolonged, but the ultimate result was recovery of the patient. However, the millionaire put up a howl like a stuck pig because he had been charged one thousand dollars for service which he very inconsistently remarked could be secured by the person of average means for a quarter of the amount charged him. Occasionally a wealthy and grateful patient gives his physician an honorarium that is handsome, but such patients are few and far between, and we regret to say that not one physician in a thousand ever runs across such a patron. Most of the well-to-do patients want the best service, even more attention than given the patient in ordinary circumstances, but are unwilling to pay any more for it than the average salaried employee.

"How to handle the shopping patient" seems to be a problem with some physicians, and recently the editor of *THE JOURNAL* has been asked by a correspondent, who does not desire his name known, to comment on the subject.

Generally speaking, the "shopping patient" in the end does not prove very satisfactory, for if price rather than quality of service is a consideration that influences the patient, he invariably is very critical and exacting and not infrequently has little regard for his obligation to pay for the service rendered. The most satisfactory patient is the one who comes to the physician desirous of accepting the services of that physician and willing to follow directions given, knowing full well that so far as compensation is concerned the fees charged will be consistent with the services rendered and the ability of the patient to pay. The relationship with the patient should be such that it prompts not only the continued patronage of that patient but of the friends of the patient as well.

The "telephone shopper" who desires to know the price to be charged for professional service is the worst pest of all, and of course is the one who considers price rather than quality as the principal consideration in the employment of a physician. The best way to handle the "telephone shopper" is to say courteously that fees are quoted only after obtaining an intelligent idea as to the

nature of the work to be done as based upon an examination and that fees are in keeping with the value of services and ability of the patient to pay. We believe that the point to be remembered is that conscientious service, courteous treatment and fees consistent with the services rendered and the ability of the patient to pay will result in a satisfied clientele, and that desirable patrons will have sufficient confidence in and respect for the physician to preclude any shopping for prices or haggling over fees charged.

THE Indiana legislature will convene once more in January. As usual many bills of direct or indirect interest to physicians will be presented, but of especial interest will be those bills which have a direct bearing upon the economic position of the medical profession. At the present time medical men are fighting for an existence as independent practitioners of medicine, and accordingly it becomes more necessary than ever before to watch our legislature with a view to preventing the enactment of objectionable and injurious legislation affecting their welfare. Some opponent of the medical profession who is a fanatic or member of a pseudo-medical cult may, in an unguarded moment, get his bill passed unless a united effort on the part of medical men is made to prevent such action.

Never has there been a greater need for unity of purpose and action on the part of medical men in preventing legislation that may be really tragic in its effect upon the economic position of the individual physician, and it is time for every physician to put aside his party allegiance and work for his own interests. That means one and only one thing in the coming election, and that is to determine as early as possible the attitude and feeling of candidates for office concerning the individual physician's interest, and then vote for those candidates for office who are favorable to us, no matter what their politics may be. The wives of physicians should do likewise, and in that connection we call attention to the valuable work that can be done by members of the Woman's Auxiliary. Very naturally some of the partisan newspapers and politicians will say that medical men should not engage in politics to the extent recommended, but all we have to say in answer to the argument is that there is no more reason why the medical men should not fight for their own existence than that the laboring men, the manufacturers, or the merchants should not work politically for their personal benefit. Altogether too long we have been lulled to sleep by the song of the partisan politician that medical men belong to a dignified profession and should not to the slightest extent engage in politics, but there isn't one logical argument that can be offered to show the reason why we should not be just as much interested in self-

preservation as the followers of any other vocation. Therefore, for once, why not work for our own interests and not be influenced by any party yoke?

WE are very much pleased to note that the private laboratories of the state have come to some understanding with the State Board of Health concerning the manner of regulating free service by our state laboratory, which up to this time has been a bone of contention. As a matter of fact the State Laboratory is imposed upon shamefully by physicians as well as lay persons, and we think we are justified in saying that the State Board of Health has not put forth any very active effort to prevent such imposition. Recently it has been decided that laboratory work will not be accepted by the State Laboratory except under certain conditions which if followed faithfully by physicians will result in largely correcting the evils that have prevailed up to the present time. Naturally there are a few crooked and dishonest physicians who, in spite of all regulations, will find ways whereby they can impose upon the State Laboratory, but we sincerely hope that the number will be small. The State Laboratory should not be in competition with private laboratories and, furthermore, the State Laboratory should not be aiding in the altogether too prevalent means offered today of pauperizing our citizens and increasing dependency. Furthermore, we need the private laboratories in every populous community, but they soon will go out of existence if the State Laboratory offers the kind of competition that has existed in the past. The medical profession, individually and collectively, should be interested in maintaining well-equipped and competent private laboratories. Let's get away from this selfish idea that we must care for only ourselves and let the other fellow struggle for himself. There isn't one physician out of five hundred who can do his own laboratory work, and therefore he must depend upon others to do his laboratory work for him. On the other hand, the private laboratories are dependent upon individual physicians, and if they do not get the work from the individual physicians then they must, of necessity, go out of business. The State Laboratory may be doing the highest type of work, but it certainly does not deserve confidence over and above that placed in the better class of private laboratories. We have no objection to the existence of the State Laboratory, which is needed in strictly public health work, but we are unalterably opposed to free services by the State Laboratory to physicians or laymen who are amply able to pay for the service and should be compelled to do so.

MEDICO-LEGAL DEPARTMENT

(Continued from page 420)

desire to practice some special method or system of healing must conform by the requirements of the law to the same standards as those exacted of

the regular medical student in all other subjects than the excepted ones.

Now if a chiropractor obtains a license to practice medicine in all its branches except surgery, obstetrics and materia medica through an examination by the State Board and the obtaining of a certificate thereby, the next question would be whether the use of an x-ray could be said to be a thing that would fall within any of the excepted fields. If it could be said that it is a form of surgery then the chiropractor would have no right to its use.

Those who obtain their licenses to practice special methods and systems of healing by means of an examination before the State Board in all subjects except materia medica, obstetrics and surgery are not limited in the same manner as the group who came in under what has been called the "grandfather" clause.

From the foregoing analysis of the statute I am of the opinion that a chiropractor who was licensed in the second group could use x-ray; and that those who were licensed in the first group could use it only if they had been using it on January 1, 1927, and it had been taught as a part of the method or system of healing in the school from which they graduated.

SECRETARIES' DEPARTMENT

I hope there will be as many secretaries present at the meeting in Fort Wayne in September as there were in Chicago last April. The *Journal of the American Medical Association* and the *JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION* want news items such as meetings, speakers at meetings, deaths, marriages, or anything that will be interesting to the medical profession. They say Indiana is shy on furnishing such information. Send in the dope so that it can be published. Doctor Harshman, of Fort Wayne, sent in a report that summarized all the doings of the medical society for the past year. This report will be published in *THE JOURNAL*. Look for it and then try to send in a report like it.

Did you see the advertisement of the Public Health Institute in the *Chicago Tribune* for August 20, 1930? How they treat and diagnose—pay or no pay. This is one of the things the medical profession has to face.

The Indiana Pharmaceutical Association is going to have an exhibit at the state meeting. They are going to show U. S. P. preparations and how they can be used in prescriptions with a great saving to the patient.

Have you had your vacation? Better take one before the medical societies begin to meet. It will give you more pep. A. M. MITCHELL, M.D.,

Terre Haute.

DEATH NOTES

ALBERT J. BUXTON, M.D., of Anderson, died July 28th, aged sixty-eight years. Dr. Buxton

graduated from the Starling Medical College, Columbus, in 1897.

FRED G. McMITCHELL, M.D., (colored) of Gary, died July 30th, aged fifty years. Dr. Mc-Mitchell graduated from the Meharry Medical College, Nashville, Tennessee, in 1914.

EUGENE BUEHLER, M. D., until recently of Indianapolis, from where he had gone to Texas about a year ago, died suddenly at his home near Brownsville, Texas, August 6th. Dr. Buehler was fifty-eight years old. He graduated from the Central College of P. and S., Indianapolis, in 1898.

JAMES W. McKINNEY, M.D., of Bluffton, died August 16, aged sixty years. Dr. McKinney was a member of the Wells County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from the Starling Medical College, Columbus, in 1898.

ELI JOHN T. PAXTON, M.D., of Rushville, died July 27, aged sixty-seven years. Dr. Paxton had been ill for several months. He was a member of the Rush County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from Miami Medical College, Cincinnati, in 1893.

O. L. SUTHERLAND, M.D., aged seventy years, for thirty-eight years a practicing physician at Laporte, died August 10th, following a short illness. Dr. Sutherland was a member of the Laporte County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the University of Michigan Homeopathic Medical School, Ann Arbor, in 1891.

NEWS NOTES AND PERSONALS

DR. GEORGE G. RICHARDSON has moved from Van Buren to Marion, Indiana.

DR. E. H. BRUBAKER has moved his office to 624 East Twenty-third street, Indianapolis.

DR. WILL C. MOORE, of Muncie, suffered a broken leg, August 10th, when he stepped into a hole on his farm.

THE Orange County Medical Society held a meeting at West Baden, August 12. Dr. R. E. Baker presented a paper.

DR. PAUL D. MOORE is conducting the late Dr. C. S. Oakman's roentgen and radium laboratories at the Ball Memorial Hospital in Muncie.

THE meeting of the Inter-State Post Graduate Medical Association of North America will be held at Minneapolis, Minnesota, October 20th to 24th, inclusive.

THE Whitley County Medical Society held a meeting at Columbia City, August 19th. Dr. Miles F. Porter, Jr., of Fort Wayne, presented a paper on "Birth Control."

ON August 14th, Dr. A. M. Mendenhall, of Indianapolis, addressed the Cambia County Medical Society, at Johnstown, Pennsylvania, on "Some Newer Things in Obstetrics."

THE Hendricks County Medical Society held a meeting at Danville, Indiana, July 18th. Delegates and alternates to the State Medical Association were elected. Hendricks County now has eighteen members in good standing.

THE Lawrence County Medical Society held its regular meeting August 6th. Dr. Edwin N. Kime, of Indianapolis, gave an illustrated lecture upon the following subject: "Diathermy and Quartz Light Therapy in General Medical Practice."

THE Jefferson County Medical Society held a meeting at Madison, July 24th. Dr. E. N. Kime, of Indianapolis, presented a paper on "Electrotherapeutics from the Standpoint of the General Practitioner." The talk was illustrated with lantern slides.

THE Miami County Medical Society was addressed by Dr. E. N. Kime, of Indiana University School of Medicine, on August 29th, 1930. The subject discussed was "Common Skin Affections." It was illustrated by practical demonstration and lantern slides.

MISS ANNE CHAMBERLAIN HODGES, daughter of Dr. and Mrs. Fletcher Hodges, of Indianapolis, was married August 12, to Mr. Jesse J. Garrison, who is an instructor in the University of Wisconsin. Mr. and Mrs. Garrison have left for Europe and will spend a year in Paris.

DR. A. M. MITCHELL, of Terre Haute, attended the meeting of the medical examiners of the Aero Medical Association of the U. S. Department of Commerce for Aviation. The annual meeting was held in Chicago in connection with the national air races, August 28th, 29th and 30th.

THE Jay County Medical Society held a dinner meeting at the Country Club, Portland, July 11th. Dr. E. B. Mumford, of Indianapolis, addressed the meeting, his subject being, "Comments on Clinical Material or, Resolved, That Failures Attract More Attention than Successes."

THE Grant County Medical Society held its regular meeting at Marion, July 30th. Drs. Z. T. Hawkins and G. G. Eckhart presented a paper on "Symptoms, Diagnosis and Treatment and Reports of Cases of Appendicitis, Treated in Grant County Hospital During Past Ten Years."

THE fortieth annual meeting of the American Physical Therapy Association will be held at the Hotel Sherman, Chicago, October 6 to 10, 1930. The first two days will be devoted to didactic and clinical instruction. Further information may be obtained from the secretary, Dr. C. C. Vinton, 1650 Broadway, New York.

THE Whitley County Medical Society held a meeting at Churubusco, July 8th. Dr. P. G. Garber presented a paper on "Albuminuria of Pregnancy" and Dr. J. Briggs talked on "Puerperal Insanity." A chicken dinner was served preceding the business meeting. Only two members of the society were absent from this meeting.

AT a board meeting held in the City Hall, Indianapolis, July 25th, Dr. William A. Doeppers was continued as superintendent of the Indianapolis City Hospital; Dr. Herman G. Morgan was renamed secretary of the Board of Public Health, and Dr. Frederick E. Jackson was selected president of the Board of Public Health to succeed Dr. H. S. Leonard.

ON June 3 the following officers of the Fort Wayne Medical Society were elected for the ensuing year: President, Charles Rothschild; vice-president, H. N. Senseny; secretary, L. P. Harshman; treasurer, L. S. McKeeman; board of censors, E. H. Schlegel, to serve three years; delegates for two years, J. M. Pulliam and D. D. Johnston; alternates for two years, Noah Zehr and L. B. Schneider.

THE Academy of Medicine of Lima and Allen County (Ohio) held a postgraduate lecture course September 15th and 16th. Dr. W. McKim Marriott, of St. Louis, lectured on "Practical Points in the Care and Feeding of Infants," and "Recent Investigations on the Nature and Treatment of Nephritis." Charles Louis Mix, M.D., of Chicago, presented "Diagnosis of Cardiac Diseases" and "Diagnosis of Upper Abdominal Diseases."

THE U. S. Civil Service Commission announces open competitive examination for social worker (psychiatric) and junior social worker, applications for which positions must be on file with the U. S. Civil Service Commission, Washington, D. C., not later than December 30, 1930. Examinations are to fill vacancies in the Veterans' Bureau hospitals throughout the United States. Full information may be obtained from the Commission at Washington, D. C.

AT the recent meeting of the American Association for the Study of Goiter, at Seattle, Washington, Dr. William F. Reinhoff, Jr., of Johns Hopkins University, Baltimore, Maryland, received the annual award of \$300 for the best essay dealing with the goiter problem. Drs. O. P. Kimball, of Cleveland, Ohio, and E. P. and D. R. McCullagh, Cleveland Clinic Foundation, Cleveland, Ohio, and Robert P. Ball, of the University of Louisville, received honorable mention.

THE Indiana Tuberculosis Association offers short courses in tuberculosis to the physicians of Indiana, and in order to make it possible for the physicians to attend these courses without much loss of time, several sanatoria of the state will be used as teaching centers for the physicians in that vicinity. Any one wishing to attend the course may select any place preferred. Only two days will be devoted to the work. The purpose of the course is to acquaint the physicians with recent progress in the treatment of tuberculosis. Courses will be held at the following institutions on the dates indicated: Healthwin Sanatorium, South Bend, September 30 and October 1; Boehne Tuberculosis Hospital, Evansville, October 1 and 2; Sunnyside Sanatorium, Oaklandon, October 2 and 3; Lake County Tuberculosis Sanatorium, Crown Point, October 7 and 8; Indiana State Sanatorium, Rockville, October 7 and 8; Irene Byron Sanatorium, Fort Wayne, October 21 and 22; William Ross Sanatorium, Lafayette, October 28 and 29. In order that definite plans may be made it is necessary to ascertain the number of physicians who will be interested in enrolling for the course. There will be no fee attached to the course which is being presented as an aid to the medical profession. Requests for further information should be addressed to the Indiana Tuberculosis Association, Indianapolis.

FOLLOWING out the recommendation of the Legislative Committee of the State Medical Association, a committee, representing the private medical laboratories, met with the State Board of Health at a special meeting of the Board, August 6, for the purpose of discussing methods and agreeing upon procedures in order to secure the most efficient laboratory service for physicians throughout the state. Matters of mutual interest to the medical laboratory men, to physicians generally and to the Laboratory of the State Board of Health were discussed, and a plan having to do with specimens submitted to the State Laboratory for examination, also having to do with establishing higher standards of laboratory service through official approval by the State Board of Health was agreed upon. This plan will be submitted to the House of Delegates of the State Medical Association through the Legislative Com-

mittee of the State Association at the annual meeting in Fort Wayne. The committee representing the private laboratories of the state consisted of Dr. A. S. Giordano, South Bend; Dr. M. W. Lyon, South Bend; Dr. B. W. Rhamy, Fort Wayne; Dr. Harry K. Langdon, Indianapolis and Dr. Frank Forry of the Indiana University School of Medicine.

THE thirty-sixth annual conference of State Health Officers with the State Board of Health will be held in Fort Wayne beginning Monday afternoon, September 22. The sessions of the conference will continue throughout Tuesday, September 23 and until noon of Wednesday, September 24. These dates immediately precede the annual session of the State Medical Association which will be held also in Fort Wayne, the scientific program of the Association beginning Wednesday afternoon, September 24. The State Health Officers' Conference includes county, city and town health officers throughout the state who are required by law to attend such conferences when officially called by the State Board of Health, with necessary expenses paid by the counties, cities and towns. The conference is usually attended by from two hundred and fifty to three hundred health officers, public health nurses and others interested in public health administration. The program for the Fort Wayne conference will include a general session on Tuesday evening, open to the public, at which the principal address will be given by Surgeon A. J. McLaughlin of the U. S. Public Health Service. Dr. F. J. Underwood, State Health Commissioner of Mississippi, will be on the program to discuss results accomplished in that state through the work of full-time county health departments. Among other subjects to be discussed will be supervision and control of milk supplies, protection of public and private water supplies, prevention and control of communicable disease, better sanitation throughout the state, maternity and infant hygiene, public health nursing, reporting of vital statistics, with special reference to Indiana being admitted to the Morbidity Registration Area of the United States, uniform quarantine regulations, protection of food supplies and needed legislation to enable Indiana to carry out more efficient public health administration.

Headquarters of the conference will be at the Anthony Hotel with meetings of the conference being held in the Anthony Hotel assembly room. Official notice of the conference, with a complete program, will be sent to all health officers of the state about two weeks before the conference date. Every health officer of the state should make a special effort to not only attend the Health Officers' Conference, but to attend the session of the State Medical Association following the conference.

INDIANA UNIVERSITY NEWS NOTES

INDIANA UNIVERSITY's fall semester will open September 15 with registration of students. Enrollment in classes will take place Tuesday, September 16, and regular classroom work will begin Wednesday. An orientation program for new students opened September 10th at which time all new students assembled at the university.

A total of 135 students have been granted admission to the Indiana University School of Medicine at Bloomington for the coming fall semester. These 135 students were chosen from a group of between 500 and 600 students who applied for admission. Space and equipment in the school of medicine are available for only 135 students.

RALPH JONES, of Paterson, N. J., has been appointed secretary of the Indiana University Y. M. C. A. to fill the vacancy left by Roy Johnston, who resigned last spring. Mr. Jones is a graduate of DePauw University, has had graduate work at Oberlin College, and for the past five years has been associate secretary of the Y. M. C. A. of Paterson, N. J. He will take up his work at Indiana University September 1.

DR. BERNARD CHESSE, who received the M.D. degree from Indiana University in 1924, a lieutenant in the medical corps of the United States army, has been ordered to the government school in Washington, D. C., for six months' graduate training. For the past three years he has been stationed at the naval base hospital in Portsmouth, N. H., as head doctor of the dispensary. Previous to that time he was in hospital service on the U. S. S. Mercy, and on a surveying ship on a cruise to South America.

DR. LLOYD H. ZIEGLER, who was graduated from Indiana University in 1914, who has been on the staff of the Mayo Clinic in Rochester, Minn., has resigned to accept the position as head of the department of neurology and psychiatry in the Albany Medical School of Albany, N. Y. After leaving Indiana University, Dr. Ziegler was connected with George Washington University and Johns Hopkins University and also was associate professor of neurology and psychiatry at the University of Colorado in 1925.

EIGHT separate exhibits and demonstrations on Indiana University's health work were included in the University's State Fair exhibits at Indianapolis this year. The school of medicine, the new child guidance clinic, the Riley Hospital, the nurses' training school, the division of dietetics of the University Hospitals, and the School of Dentistry were represented in these exhibits.

Dr. Thurman B. Rice had an exhibit on diphtheria which called attention to the fact that a positively preventable disease claims a Hoosier child victim three times every week during the year. Dr. Rice reminded State Fair visitors that sixty-five percent of all diphtheria deaths are among children under school age and that the worst months of the year are yet to come, October, November, and December. Immunization, immunization, immunization was the repeated message carried by the exhibit.

Dr. Helen P. Langner conducted a clinic for parents and made special points of the influence of habit in the child's life. Her exhibit treated problems of child obedience, jealousy, temper-spells, thumb-sucking, and child intelligence. A poster display was used in acquainting visitors with the work of the child guidance clinic organized about a year ago in the department of mental and nervous diseases of the school of medicine.

Mrs. Ethel P. Clarke, superintendent of the I. U. training school for nurses, and Miss Harriett Davis gave a daily demonstration on the university's stage program of various nursing procedures, with special emphasis on those which are applicable to the home. Miss Lute M. Troutt, dietician of the university hospitals, also gave a daily demonstration from the stage of the well-balanced diet and the eliminations and substitutions which must be made in the diet of the young and the sick. Both the nurses and the dietician explained their work over the microphone used on the stage.

Miss Winifred Conrick, of the occupational therapy department of the Riley Hospital, spoke morning and afternoon from the stage on her work with Riley child patients. She illustrated her talk with Riley slides. Miss Conrick and members of the Junior League of Indianapolis, which finances the occupational therapy work, had a booth display of baskets, toys, and other articles made by Riley children. They sold baskets to help finance the work of the department.

Riley Hospital views and posters were displayed in a booth adjacent to that of the occupational therapy department.

The School of Dentistry conducted its annual clinic. Staff members of the school under the direction of Dr. Karl Kayser examined and charted children's teeth at the request of adult visitors. An automaton dressed in the white coat of a dentist gave pertinent advice on the care of the teeth and on the relationship between bad teeth and bad health.

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

August 12, 1930.

Meeting called to order at three p. m.

Present: Wm. N. Wishard, M.D., chairman; J. H.

Stygall, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held August 5th read and approved.

The Better Business Bureau Bulletins of July 17th containing an expose' of the Tricho System for the removal of superfluous hair was reviewed by the Bureau and the secretary was instructed to abstract this article for release in Saturday morning papers of August 30th.

Radio release, August 16th—"Protection Against Typhoid Fever."

An Indianapolis physician who had been asked to address a state gathering of cultists which was to meet in Indianapolis asked the Bureau to decide whether or not he should accept such an invitation. This physician said that his talk would be along educative and not scientific technical lines. The Bureau instructed the secretary to write to the physician saying that the Bureau had no power to act in such a matter outside of a purely advisory capacity. In such capacity the Bureau would not advise that the physician make such a talk.

The Bulletin of the Better Business Bureau for August 7th, containing the article, "Government Takes a Hand in Warning Against Obesity Cures," brought to the attention of the Bureau of Publicity. The Bulletin quotes from a release by the Food, Drug and Insecticide Administration, Department of Agriculture, issued on April 24, 1930, which states: "No drug or mixture of drugs known to the medical profession at the present time can be offered for the promiscuous use of the public in reducing weight without introducing an element of danger. Dr. F. J. Cullen of the department states: 'Promoters of so-called obesity remedies and fat-reducing cures are attempting to influence fat people to spend money for worthless or dangerous preparations.'" The Better Business Bureau Bulletin states further: "Some of these preparations contain poisonous drugs. Others are soaps to use in bathing. It is usually not the use of the soap which brings about a temporary reduction in weight, but the hot baths and exercise which alone, without the use of the fat-reducing soap would be more effective."

The attention of the Bureau of Publicity was called to an article which appeared in a recent issue of the *St. Paul Pioneer Press* in which the secretary of the Minnesota State Medical Association warned against the increasing danger of institutionalizing world war veterans. The secretary of the Minnesota State Medical Association favored taking care of such cases at local hospitals instead of sending them long distances to federal hospitals. He said, "The number of cases will increase immeasurably as the veterans grow older. They are likely to become a serious aggravation to the whole American social problem. Veterans are entitled to the best and wisest care in the power of the government to give them. But it is my opinion that many of them could get such care much better in their own homes or hospitals of their own choice. The government at the same time would be spared millions of dollars in further hospital building programs and the personnel to staff them."

The following letter was sent to the editors of daily papers in Indiana, to the officers of the State Association, and to the secretaries of the various county medical societies:

"For the past six years the Bureau of Publicity of the Indiana State Medical Association has prepared and distributed weekly health 'stories' to the papers of the state.

"An attempt has been made to write on scientific medical subjects in plain, understandable language. The purpose has been to make these articles wholly impersonal in character, trying to convey to the public an elementary understanding of certain diseases to be avoided, and urging the readers to consult competent physicians and to avoid quackery in all its forms.

"These releases, we believe, have stimulated an interest and better understanding on the part of the public in community and individual health problems. The Bureau, which is composed of three active practicing physicians

who serve without pay and a former newspaper man, meets one afternoon each week to discuss matters of publicity and to prepare these articles. This Bureau would like to receive comments, favorable or otherwise, and suggestions on this service, from you as an editor (from you as an officer of the State Association—or—from you as secretary of your county medical society).

"Thanking you, we are

Yours sincerely,

WM. N. WISHARD, M.D., Chairman,
Bureau of Publicity,
CHAS. P. EMERSON, M.D.,
JAMES H. STYGALL, M.D.,
THOMAS A. HENDRICKS,
Executive Secretary."

The suggestions and comments received as a result of this letter are to form a basis for the annual report of the Publicity Bureau to be made at the annual session at Fort Wayne, September 24th and 25th.

An outline of points to be covered by the annual report was presented to the members of the Bureau.

The following bills were approved for payment:

| | |
|--|---------|
| W. K. Stewart Co..... | \$ 1.00 |
| Indianapolis Commercial Printing Co..... | 4.50 |
| Central Press Clipping Service..... | 5.76 |

\$11.26

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole August 19, 1930.

FORT WAYNE (ALLEN COUNTY) MEDICAL SOCIETY

In rounding out the yearly report and election of officers I wish to make the following statements:

1. I have collected dues from every member for 1930 except Doctor Applegate.

2. We have received by transfer during the year Dr. Ralph Elston from Kendallville, Dr. A. M. Fichman from Wisconsin, Dr. C. B. Parker from Antwerp, Ohio, and Dr. A. Ray Chester from Van Wert, Ohio.

3. During the year we have established a clearing house for charity cases and have handled 303 cases referred by Community Chest agencies. We have been co-operating with the Committee on the Cost of Medical Care in a survey being made in Allen county. We have a diphtheria committee which is working with the parent-teacher organizations here in the city in a campaign for prevention of this disease.

4. The officers of the society constitute a committee which is going into the details of establishing a credit rating bureau.

5. On April 8th, we entertained the Northern Tri-State Medical Association, who held their meeting here on that date. In September of this year we will entertain the State Association and our committees are very actively at work. Dr. Miles F. Porter, Sr., is general chairman; Dr. L. P. Harshman is chairman of the Finance Committee and Dr. Jessie Calvin has charge of arrangements for the entertainment of the doctors' wives.

6. Meetings were held each week during the year. Thirty-one members took active part in the preparation and presentation of programs. Five doctors from other cities in Indiana presented worthwhile papers. These physicians were Dr. C. P. Clark and E. V. Hahn, of Indianapolis; Dr. Roscoe Beeson, of Muncie, and Dr. Shirley Wisheart, of Evansville, and Dr. W. J. Moenkhaus, of Indiana University. Six men from out of the state were speakers on various subjects. These were Dr. William Englebach, of Santa Barbara, California; Dr. Walter M. Simpson, of Dayton, Ohio; Dr. H. E. Hertzler, of Halstead, Kansas, and Drs. R. H. Durham,

E. S. Parmenter, and A. D. LaFerte, of Detroit, Michigan.

7. During the year a banquet was held in honor of Dr. S. H. Havice.

8. On June 3, 1930, the following officers were elected:
President.....Dr. Charles Rothschild
Vice-President.....Dr. Herbert N. Senseny
Secretary.....Dr. L. P. Harshman
Treasurer.....Dr. L. S. McKeeman
Board of Censors.....Dr. Edw. Schlegel (three years)
Delegate for Two Years.....Dr. J. M. Pulliam
(With Dr. Noah Zehr as alternate)
Delegate for Two Years.....Dr. D. D. Johnston
(With Dr. L. B. Schneider as alternate)

9. June 10th the Annual Golf Tournament and Dinner bridge was held at the Fort Wayne Country Club at which time there were "exhausted" as well as "suspended" sensibilities. The ladies' committees for the state meeting had a business session at this time.

Yours very truly,

L. P. HARSHMAN, M.D.,
Secretary Fort Wayne

(Allen County) Medical Society

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

The following products have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in New and Nonofficial Remedies:

ALPHANAPHTHOL.—The actions of alphanaphthol resemble those of betanaphthol. The literature is rather contradictory and unsatisfactory as to the relative toxicity, but it is probably of a similar order. Alphanaphthol is employed locally as an antiseptic and germicide; it is not generally used internally.

ALPHA NAPHCO.—Compound Solution of Alphanaphthol.—Alpha Naphco contains alphanaphthol 10 gm., glycerin 32 gm., soft soap 23.8 gm., water to make 100 gm. When tested against *B. typhosus* by the U. S. Hygienic Laboratory method, alphanaphco has a phenol coefficient of 1.46. Carel Laboratories, Redondo, California.

PYRIDIUM.—Phenylazo-2-6-diamino-pyridine monohydrochloride.—The monohydrochloride of an azo dye of the pyridine series, phenylazo diamino-pyridine. Pyridium has marked penetrating power and is non-toxic and non-irritant in therapeutic dosage. It is rapidly eliminated through the urinary tract. It is bactericidal in aqueous solution against staphylococcus, streptococcus, gonococcus, *B. coli* and even *B. diphtheriae*. It is proposed for use in gonorrheal infections, urinary diseases, and in colon bacillus and mixed infections. The drug is supplied in the form of Aqueous Solution of Pyridium, one percent; Pyridium Ointment, ten percent; and Pyridium Tablets, 0.1 gm. Merck & Co., Inc., New York.

POLLEN ANTIGEN-NATIONAL.—Liquids obtained by extracting the dried pollen of plants with a 0.5 percent sodium chloride solution containing sodium bicarbonate and phenol. For a statement of actions and uses, see Allergic Protein Preparations, New and Nonofficial Remedies, 1930, p. 23. Pollen Antigens-National are marketed in packages of one 5 cc. vial containing, respectively, 50, 100 and 250 units per cc. The following products have been accepted: Ragweed Pollen Antigen-National and Timothy Pollen Antigen-National. National Drug Co., Philadelphia.—(*Jour. A. M. A.*, July 5, 1930, p. 35.)

MEAD'S 5 D COD LIVER OIL WITH VIOSTEROL.—A brand of cod liver oil with viosterol 5 D (N. N. R.).—For a discussion of the actions and uses of cod liver oil with viosterol 5 D, see New and Nonofficial Remedies, 1930, p. 257. Mead, Johnson & Co., Evansville, Indiana.

SIOMINE.—Hexamethylenetetramine tetraiodide. Siomine contains 78.5 percent of iodine. Siomine is decomposed

in the intestine with formation of hexamethylenetetramine and iodide, the rate of absorption and excretion being essentially the same as that of inorganic iodides. It, therefore, produces the effects of ordinary iodides from which it differs only in that it can be administered in solid form. No therapeutic claims are made for the hexamethylenetetramine component of siomine, this being present only to render the substance insoluble. The dosage is the same as that of potassium iodide. Siomine is supplied in the form of capsules containing, respectively, one-half grain, one grain, two grains, and five grains. Pitman-Moore Co., Indianapolis.

EPHEDRINE NASAL JELLY-MALTBIE.—It is composed of ephedrine sulphate-N. N. R. 1 percent, menthol 0.25 percent and sodium benzoate 0.5 percent in a glycerite of tragacanth base. For a discussion of the actions and uses of ephedrine sulphate, see New and Nonofficial Remedies, 1930, p. 167. Maltbie Chemical Co., Newark, New Jersey.

EPHEDRINE HYDROCHLORIDE-P. D. & Co.—A brand of ephedrine hydrochloride-N. N. R. For a discussion of the actions and uses of ephedrine hydrochloride see New and Nonofficial Remedies, 1930, p. 167. Ephedrine hydrochloride-P. D. & Co. is supplied in the form of capsules containing, respectively, three-eighths grain and three-fourths grain. Parke, Davis & Co., Detroit.

ELIXIR OF PYRAMIDON.—Each 4 cc. (1 fluidrachm) contains pyramidon (New and Nonofficial Remedies, 1930, p. 314) 0.162 gm. (2½ grains) in a menstruum containing alcohol, twenty percent. H. A. Metz Laboratories, Inc., New York.

PYRAMIDON TABLETS 1½ GRAINS.—Each tablet contains pyramidon (New and Nonofficial Remedies, 1930, p. 314) 1½ grains. H. A. Metz Laboratories, Inc., New York.

THIO-BISMOL.—Sodium bismuth thioglycollate. A salt formed by the interaction of sodium thioglycollate and bismuth hydroxide containing approximately thirty-eight percent of bismuth. Thio-bismol is proposed as a means of obtaining the systemic effects of bismuth in the treatment of syphilis (Bismuth Compounds, New and Nonofficial Remedies, 1930, p. 94); it is a water soluble compound, readily absorbable, and produces relatively little local injury. The product is supplied in the form of ampules containing 0.2 gm. of thio-bismol. Parke, Davis & Co., Detroit.—(*Jour. A. M. A.*, July 19, 1930, p. 200.)

ACCEPTED DEVICES FOR PHYSICAL THERAPY

The following have been accepted by the Council on Physical Therapy of the American Medical Association for inclusion in its list of accepted devices for physical therapy:

THE DAVIS INHALATOR.—The Davis Inhalator (Bullard-Davis, Inc., New York) is a portable apparatus designed to assist physicians in the administration of oxygen or a mixture of oxygen and five-percent carbon dioxide in resuscitation in various forms of asphyxia. Compressed gases are contained in tanks and by a reducing valve may be delivered at the desired pressure through a breathing bag and mask as demanded by artificial or natural breathing of the patient. The apparatus meets the requirements for inhalators of approved standard and incorporates devices which make for flexibility, adaptability and safety.—(*Jour. A. M. A.*, July 19, 1930, p. 200.)

PROPAGANDA FOR REFORM

POMPEIAN OLIVE OIL NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that Pompeian Olive Oil was presented by the Pompeian Corporation for inclusion in New and Nonofficial Remedies. The Council explains that the product might be recognized as a brand of olive oil, U. S. P., marketed under the pharmacopeial name ("Pompeian being used merely to identify the firm's brand") were it not that claims of unique advantage and therapeutic potency were advanced. The Council cannot admit in reference to this brand of

oil the claim made that the "ease of its digestion and assimilation is far greater than that of any other vegetable or animal oil." After considering the evidence submitted by the proprietors, the Council decided that Pompeian Olive Oil is not acceptable for New and Nonofficial Remedies.—(*Jour. A. M. A.*, July 5, 1930, p. 35.)

RICKETS AND VITAMIN D.—Without detracting in the least from the merited value of viosterol in the treatment of rickets, certain recent investigations raise a question as to the simplicity of the pathogenesis of rickets implied in the current use of viosterol. It has been pointed out recently that, whereas both viosterol and cod liver oil are extremely efficacious in curing rickets, only the latter contains in addition the indispensable vitamin A. Although the most obvious function of calcium and phosphorus is in the building of bones, there are other demands for these mineral elements which, at times, become of great importance and it has been shown that, whereas vitamin D is concerned with the calcification of bones, the retention of calcium and phosphorus in the body is largely a function of the level of these materials in the diet. A comparison of the efficacy of cod liver oil and of viosterol as prophylactic antirachitic agents showed that of 123 children given viosterol twenty-nine percent were not protected against rickets, while of one hundred given cod liver oil three percent showed rickets, although the former group received twice the number of units of vitamin D given the latter group.—(*Jour. A. M. A.*, July 5, 1930, p. 38.)

THERAPY WITH OVARIAN PREPARATIONS.—The Council on Pharmacy and Chemistry sponsors the following statement on therapy with ovarian preparations in the current (1930) edition of New and Nonofficial Remedies: "Rational as ovarian therapy may theoretically appear to be in some conditions, the actual results rarely are striking, and often nil to the careful observer. It is altogether probable that the activity which may be presented by the fresh gland is not contained in a finished desiccated product, or else, when given by mouth, it is destroyed by the digestive juices; extensive clinical experience has failed to establish the value of desiccated preparations administered orally. There is considerable evidence that the aqueous extracts prepared for hypodermic use are inert * * * much work has been done toward the elaboration of a potent, standardized preparation of the ovary, and as a result of these investigations such potent standardized preparations for use by subcutaneous injection have become available. These preparations have been shown to induce estrus in mature animals and to induce sexual maturity in immature animals. Somewhat limited clinical evidence indicates their probable value in ovarian hypofunction." The Council has omitted all desiccated ovary preparations for oral administration on the ground that there is no adequate evidence for their value and, so far, has not accepted any ovarian hormone preparation, because the evidence for the value of these was considered inadequate.—(*Jour. A. M. A.*, July 5, 1930, p. 64.)

DESICCATED PITUITARY PREPARATIONS OMITTED FROM N. N. R.—In 1928 the Council on Pharmacy and Chemistry discussed the lack of acceptable evidence for the value of pituitary preparations administered by mouth and concluded that extensive clinical experience had failed to establish the value of desiccated pituitary preparations for oral administration. At that time the Council decided to omit such preparations when the period for the acceptance of the products included in New and Nonofficial Remedies should expire, unless new evidence became available in the meantime permitting a different action. At the expiration of this period no favorable evidence had become available. Accordingly, the Council has directed the omission of all desiccated pituitary preparations now included in New and Nonofficial Remedies, namely: Desiccated Pituitary Body-Armour, Desiccated Pituitary Substance (Anterior Lobe)-Armour, Desiccated Pituitary Substance (Posterior Lobe)-Armour, Anterior Pituitary Desiccated-Lederle, Posterior Pituitary Desiccated-Lederle.

(Continued on adv. page xx)

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A M E R I C A N O P T I C A L C O M P A N Y

TRUTH ABOUT MEDICINES

(Continued from page 472)

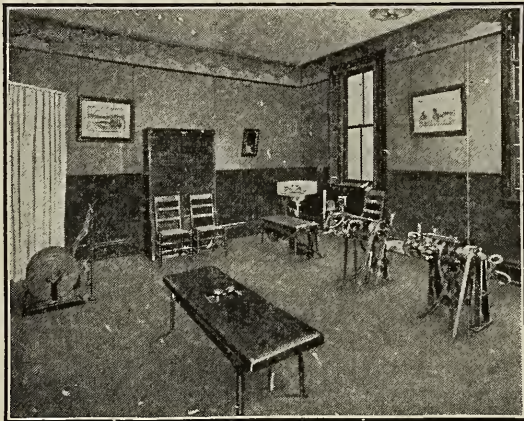
le, Whole Pituitary Desiccated-Lederle, Pituitary Body Anterior Lobe Desiccated-Mulford, Anterior Pituitary-P. M. Co., Desiccated Pituitary Substance P. M. Co. Desiccated, and Posterior Pituitary P. M. Co. Desiccated.—(*Jour. A. M. A.*, July 19, 1930, p. 201.)

LYDIN NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that "Lydin," a product of the Harrower Laboratory, Inc., is claimed to be "a physiological sex-stimulant of note" consisting of a combination of "the male sex hormone" with "the antisterility fat-soluble vitamin-E." It is marketed in capsules for oral administration and is recommended for use in the treatment of impotence with the suggestion that "the indications are too well known to be enumerated." The Council publishes a report on the biologic assay of "Lydin" by T. F. Gallagher sent to the Council by F. C. Koch, head of the Department of Physiological Chemistry and Pharmacology of the University of Chicago. This study shows that when administered by mouth "Lydin" is without effect as measured on capons by the comb growth method or on guinea-pigs as measured by the spermatozoa motility test. Brown-Sequard was convinced that an extract of the testes promoted the vitality, but his experiments were not confirmed or accepted. In the meantime, the available knowledge of the glands of internal secretion has aroused commercial promoters to the exploitation of all sorts of glandular extracts and combinations without an iota of evidence to show that any preparation of extracts of the testes, singly or in combination, has ever been shown to have the slightest effect on the human body when given by mouth.—(*Jour. A. M. A.*, July 19, 1930, p. 201.)

THE VREELANDS QUACKERY.—Clayt Vreeland, of Cleveland, Ohio, has for some years been defrauding the baldheaded. He did business under such trade names as

"The Vreelands, Inc.," "The Vreelands," and "Vreeland." Finally the postal authorities got around to Mr. Vreeland and on June 24, 1930, the Postmaster General issued a fraud order debarring from the United States mails The Vreelands, Inc., The Vreeland, Vreeland, and their officers and agents. The business was the rather simple one of selling a preparation for the alleged growing of hair. The stuff was called "Hairerbs." It was found to be composed of glycerin and water with a trace of sage oil.—(*Jour. A. M. A.*, July 19, 1930, p. 219.)

A BAKER INSTITUTE "DIAGNOSIS".—The history of every quack concern that professes to cure cancer is monotonously alike. The scheme consists in diagnosing every simple skin lesion, no matter how benign, as cancer. Caustics are then applied and a hole eaten in the tissues with inevitable disfigurement and the patient finally sent back home "cured." Of course, occasionally the quacks get real cases of malignant disease. Most of these are sent back home in time to avoid the necessity of the "institute" having to sign the death certificate. A recent case is of interest in that the victim showed more intelligence than is frequently displayed and thus saved himself considerable suffering and disfigurement. Mr. I., an Iowa farmer, developed a lesion on the chin that worried him. He went to Muscatine to the Baker Institute where he was "examined." Mr. I. reports that he was told that he had cancer of the chin and would have to pay two hundred and fifty dollars and also sixty dollars a week hospital charges for four to six weeks. The Baker Institute according to the victim applied their cancer remedy. Then the young man got to thinking and decided that the Iowa State University was not far away and that they probably knew as much about cancer as Mr. Baker and his "institute." He went to the College of Medicine of the State University of Iowa where the dermatologic department diagnosed the lesion as *Tinea barbae*. Treatment for ringworm of the beard was instituted and in less than two weeks the young man went home.—(*Jour. A. M. A.*, July 26, 1930, p. 285.)



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THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, M.D., Editor and Manager

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ORIGINAL ARTICLES

IMPROVEMENT IN MEDICAL EDUCATION AND PRACTICE*

ANGUS C. McDONALD, M.D.

WARSAW

The constitution of the Indiana State Medical Association directs that the president shall deliver an address at each annual session. While it does not prescribe a subject for this address, it is intimated that the president shall deal in a general way with conditions governing the practice of medicine, with particular reference to our own state.

In a large measure the activities of the society have been delegated to the various committees whose work is reported in *THE JOURNAL* and will not be repeated here. The work of these committees has been tedious, and has absorbed a great deal of time and serious thought. Necessarily it has required tact and patience to secure the excellent results reported. It is to be hoped that these reports will receive the attention and appreciation which they so richly deserve.

It is my wish to call attention to the progress being made in medical care and in promotion of the public health, and particularly as it applies to Indiana. It is evident that better medical care must begin with better medical education. In this respect we believe the profession in Indiana has taken a very definite stand for high ideals in medical education. The time will be remembered when Indiana had too many detached medical schools, all of them working under great difficulties. Unselfish men in the profession realized the seriousness of the situation and helped in the important work of organizing all of the better schools into one central medical institution which with the support of the state has been able to attain levels formerly quite out of reach. I am pleased to add that this work was begun before the Carnegie investigation was undertaken. As a result of this change we now have a medical school which ranks with the best in America. The graduates of this institution have been able to hold their own with graduates of the best schools in the country. When scholarships open to young

medical men have been offered we have been pleased to see our graduates take exceptionally high rank in the examinations and practical tests. The school is deserving of the moral support of the profession, and especially the financial support of the state. It should have a comfortable increase in budget in order that thorough undergraduate work may continue. This also would enable the school to organize a systematic postgraduate course, which is most necessary if doctors are to advance professionally after graduation. Very few universities are at present giving thorough, systematic postgraduate work. Most of these schools are rather remote from our state. We believe that more men would undertake such work if it were offered near at home. The writer does not wish to preach, but he believes this an opportune time to emphasize the importance of the duty which we owe to ourselves, the profession, our patients and the public in general.

The state has found it necessary to grant time licenses to teachers in the public schools, these licenses to be renewed only after they have taken additional courses in normal schools or universities. No such limits have been imposed upon the members of the medical profession, and we sincerely hope that the necessity for such never will arise. There probably are occasions in which temporary licenses would be of benefit, but the discussion of the subject probably lies outside the bounds of present consideration. We are firm in the belief, however, that the time spent in postgraduate courses is more than compensated for by the inspiration and added confidence that is so acquired.

The increased curriculum of medical schools and the added cost of medical education have reduced greatly the number of recent graduates, which in turn has caused a rapid decline in the number of physicians in the state. At present the number of licensed physicians in Indiana is 4,145, of whom 2,690 are members of our Association. At first thought this would seem a low number for the Association, but a careful analysis by the executive secretary and myself shows that about 1,000 of the non-members are inactive or practically so. This leaves only about 500 active physicians who do not belong. It is doubtful if this situation can be improved any further.

*Presidential address, presented at the Fort Wayne session of the Indiana State Medical Association, September 24, 1930.

We have been unable to ascertain the number of physicians in the state previous to the higher requirements in medical education. It is evident that a marked decrease has occurred in the smaller cities, and that there has been an increase in the larger cities. If we may judge from the information obtained from inquiries in different communities it would seem that a decrease of fifty percent for the entire state would not be far from correct. This radical change in the number of physicians has led to some apprehension and a great deal of speculation in regard to a more adequate supply in the future for small communities. The charge has been made that many deserving young men are being deprived of the attainment of their ambitions to become physicians. Observation, however, does not confirm the assertion that the attainment of a medical degree presents more difficulties than lie in other lines of endeavor, and we all know many young men of very limited means who have succeeded in obtaining a medical education and are now successful young physicians.

However badly we may feel about the struggle of the medical student it must be apparent to all that young physicians of higher qualifications have been the result, and as time progresses this fact will become more and more manifest. In this connection it is interesting to know that the graduates of Indiana University School of Medicine who have received the Ravdin medal for leading their class in scholarship all have paid part of their own expenses, and about half of them have supported themselves entirely while in medical school.

Regarding the decrease in the number of physicians in rural communities we find many prominent men, both lay and medical, "viewing with alarm," to use a political phrase, the present condition. We desire to call attention to one paragraph from Doctor Pusey's article. He says in substance that the average number of young men going into practice during the past ten years will not exceed 1.4 per county the country over. Further, that in a county which normally would have thirty physicians the average age would be fifty-two. The expectancy of these men would be about ten years of active practice. If these figures are correct it means that there would be a complete breaking down in medical service in 1935. It must be admitted that a paper and pencil study of these facts would seem to lead to such a conclusion. But does not such a study disregard the natural laws of economy which are about as steadfast as the laws of gravity? Though these laws act slowly at times they are no less constant. It would be difficult to conceive of a demand for remunerative service that would not be supplied rather promptly. We believe that history refutes the conclusions Doctor Pusey has drawn. As a remedy for the condition which is said to exist it has been proposed that practical physicians can be trained by a shorter and less expensive course, and that

these men can supply in a satisfactory way the shortage that is expected to occur in the years rather immediately in the future. We believe that such a plan would be a backward step, and that it would be regretted. Surely the plan should be delayed until the necessity actually has arisen. The physicians of today and tomorrow will of necessity see more patients than did their predecessors. This will give them a wider experience and do much to make them better doctors.

In a tour of the state I have found that there are very few places as much as ten miles from a doctor and the great majority are less than five miles. With modern means of travel and the good roads for which Indiana is noted the localities which cannot be reached in fifteen minutes are few indeed. According to the above findings it would seem that Indiana is not suffering at the present from a dearth of physicians. Such a possibility apparently is remote except in parts of the state where economic conditions are such as hardly would encourage a young man to settle there. In the progressive communities such a shortage is usually quite temporary. If all of the medical schools of the United States should use their full capacity, approximately 5,000 more medical students could be accommodated. If a real necessity for more physicians should arise this no doubt would be a solution of the problem. In this connection it is of interest to know that our own school has been operating at full capacity for years.

We believe, and are here repeating the opinion of many physicians who have been consulted, that the much discussed increase in the cost of medical care scarcely applies to Indiana. Reformers, some of them physicians, appear to have seen evidence of abuses in the larger cities where the personal contact between physician and patient is not so close. As in all reform movements there is really some basis for complaint, but we believe that the inference that the condition is general is in error. Such abuses as may exist should be corrected at the source, for if medical care is to remain with the profession, where it logically belongs, charges must be reasonable and just. If abuses in charges for medical care should continue it is not impossible that doctors will find themselves employees of the state—which is state medicine. This would be very bad for the doctors, and even worse for the patients. May I suggest to those of us engaged in rural practice that it might be the part of wisdom and fairness to discard the taxicab system of charging for mileage when making distant calls within one's own territory. Time and service with a small mileage charge representing the actual cost of driving a car should be considered in estimating a bill, to the end that all shall receive service at a reasonable cost.

Concerning hospital expenses there seems to be no hope for relief while patients and their families continue to demand superfluous attention, and while hospitals are managed by men and women

who are unfamiliar with the essentials of the care of the sick—in short, who are unable to distinguish between essentials and expensive unnecessary frills.

The promotion of health and the prevention of disease always will remain the duty of the profession. The Indiana State Board of Health is doing excellent work, but a large share of the work must of necessity reside with the physician actually practicing in the community. When overlapping of duties occurs there necessarily will arise opportunities for misunderstanding. Such unfortunate relations must be considered in a spirit of mutual consideration, holding constantly in view the fact that we are a great and noble profession working in the interest of the welfare of mankind. Under the present law it would be difficult to conceive what better work the State Board of Health could do in its efforts to serve the public. The laboratories and offices of the Board of Health are located centrally, and cannot at all times be in close touch with distant problems. As a result local problems remain in charge of a layman or a part-time medical man trained for the practice of medicine rather than the administration of health. The present system is detached, incomplete, and in need of revision. A law which would allow the counties to employ at will an all-time medical health officer would only be doing late what others have done earlier. It would be well if the profession would use its influence in bringing about this change which seems a most urgently needed improvement in the system. Unless something of the sort is put into practice the profession may find itself in the unhappy condition of seeing non-medical health officers appointed to positions which properly are handled only by medical men.

The laws regulating the practice of medicine have been much improved, but there still remains room for improvement in protecting the people from ignorance and fraud. There are also laws which well might be repealed. In Indiana the legislature has seen fit to exercise its veto on the right of the physician to use his judgment in prescribing for the sick. The "bone dry" law of Indiana is a departure in the councils of common sense when it admits a physician to practice and follows that by placing a limit on his exercise of judgment and honesty. I am aware that the subject is a controversial one among physicians and the laity, but I believe that I am voicing the sentiments of the majority. Many of us believe that in the aged a condition of physical and mental depression does occur in which alcoholic stimulants appear to conserve the waning powers and prolong life. At least a moderate use of alcoholic beverages makes the life of the aged more comfortable. Other conditions could be mentioned where long experience has verified the same conclusion. Prohibition as now practiced is a radical departure from the recognized purpose of law

making which was intended to control the individual in relation to society in general, or in other words the conduct of one individual toward another.

It is gratifying to note the better understanding of our aims and purposes involved in our contact with the laity. Those of us who were concerned in promoting the first medical bill in the legislature discovered that the legislators doubted our purpose and questioned our personal sincerity. A notable change was shown at the next session. We believe a still greater change has occurred since then. That our publicity committee has had a large part in promoting this understanding of our ideals must be admitted by all, and the members of that committee—Doctors Wishard, Emerson and John A. McDonald—are to be highly commended for giving their time to a tedious task which has required tact and great patience. They have been assisted ably by the editor of *THE JOURNAL*, Dr. Albert E. Bulson, by Doctor Rice in the public press and in radio talks, and most of all by personal education of patients by family physicians in the office, the home and at the bedside. We must realize that the understanding of our purposes is imperative if the public is to receive the service which it deserves.

In conclusion I wish to suggest:

That higher medical education be sustained and fostered.

That post-graduate work be encouraged.

That means be devised to improve current obstetrical practice.

That physicians exercise the golden rule when making charges for services to patients in difficult financial circumstances.

That we assist in the improvement of some of our laws and the repeal of others.

That we persist in publishing our purposes to the end that the public may understand us and our motives.

That the State Board of Health be strengthened.

That we remember the altruistic idealism of the past.

And, lastly, that we foster and promote the noble purposes of our honored profession to the end that the community be served, and physicians shall retain the beneficent influence which they have earned so rightly.

THE PROBLEM OF THE MAL-NOURISHED SCHOOL CHILD*

RUSSELL HIPPENSTEEL, M.D.

INDIANAPOLIS

The purpose of this paper is to present the problem of malnutrition as it affects childhood, together with practical methods for its correction.

The problem of the undernourished school child

*Presented before the Indianapolis Medical Society, May 6, 1930.

was first called to the attention of the profession by Sill nearly twenty years ago. In his article published in the *Journal of the A. M. A.* he said: "A child is a valuable national asset, and its welfare and healthy development of great economic importance to the state, which should be legally under obligation to look after its children, who are being starved through ignorance, negligence or poverty on the part of the parents. They should be fed as every child has the right to be fed. There ought to be no such thing as a malnourished child in our land, especially in our public schools, where children are under daily observation of their teachers. It should be the public duty to see that such children are provided with nourishing food."

Since the publishing of this article the interest in this line of endeavor has spread by leaps and bounds and the literature, both of a research and popular nature, has become enormous. Articles are published in every type of magazine interested in children, such as medical, social service, public health, physical education, home economics and even in newspapers.

In a survey by Roberts of twenty magazines the number of published articles on this problem rose from six in 1912 to over two hundred and fifty in 1927, eighty-two percent of which appeared during the seven years from 1920 to 1927.

Because of this increased interest it is natural to assume that the awakening to the nutritional needs of children is now universal, and the problem is being attacked adequately. However, if we study the situation a little more clearly we find that this interest still is confined too largely to those interested in child welfare; that the work is being done in small proportion to the need and that the average parent still is inclined to regard the subject of malnutrition as but a passing fad. Also, too many of our own profession are too content to dismiss the malnourished school child with one of the two stock remarks, "He'll outgrow it," or "He's just like his mother or father in development."

Likewise, average parents have no ideal in mind by which to judge the child and their eyes are blinded further by affection. The mere suggestion that there is room for improvement is resented, and because of this lack of standard the parent accepts his own child's state of nutrition without question. In fact we have all had mothers point with pride to the high forehead or high chest of the poorly nourished child actually believing them marks of good development instead of rachitic deformities.

Estimates of the number of malnourished school children vary of course, but those actually interested in the work agree that fully one-third of the school children in the registration area are under weight. This figure also is about correct for our own county schools, as determined by averages in the bi-annual examinations.

However, the extent of this problem can be realized best by studying the findings and results of an examination conducted by the child hygiene department of one of our larger cities. There eighteen thousand children were examined with the following results:

| | |
|------------------------|-----|
| Normal nutrition | 17% |
| Fair nutrition | 61% |
| Poor nutrition | 22% |

In other words, only seventeen out of every hundred measured up to normal nutrition.

The child hygiene division for the city of New York estimates that of the one million school children registered only one hundred and seventy-three thousand have normal nutrition and two hundred and sixteen thousand very poor nutrition.

In another survey conducted in a poor rural section of this state only seven of every hundred children were found to have normal nutrition, while forty out of the hundred were decidedly poorly nourished.

Of course these figures are not entirely comparable because of the wide variety of methods used to judge nutrition but they are sufficiently so to reveal the grave situation that exists and if these studies are at all representative of the country in general we must admit that we have little reason as a nation to be conceited over the stock of children we are producing.

In order to understand the problem of malnutrition it is essential that we understand what is meant by the term. It may best be defined by describing the outward signs of its presence for it is largely by these that the success or failure of the nutritive process must be judged. The malnourished child usually is thin but may be fat and flabby. His skin is pale, sallow and pasty in appearance. There are usually dark circles underneath the eyes and the mucous membrane of his mouth is pale and colorless. His tongue is coated, his bowels constipated. His chest is flat and narrow and because of lack of muscular tone his shoulders are rounded, sometimes protruding to such an extent as to produce the deformity known as wings. His abdomen is protruding, his arches may be pronated or flat and his whole attitude one of drooping fatigue. He usually is listless in play and there is apt to be a lack of mental vigor. In disposition this child may be extremely irritable and difficult to manage. He usually sleeps lightly and is "finicky" about his food.

Whether such a picture of malnutrition can be considered clinical entity is open to question, although Emerson believes that it is, and his arguments carry a great deal of weight.

He believes that malnutrition has a characteristic history, definite symptomatology and pathological signs and indicates that the child is not growing properly and should be classified as sick. Talbot, on the other hand, believes that malnutrition is only a symptom resulting from many dis-

eases, social conditions or poor hygiene or all combined and that if these are remedied the malnutrition will take care of itself.

Among other nutrition workers it is agreed generally that any child who shows external signs of a faulty nutritive process is certainly malnourished whatever the cause may be and should be so considered.

Because of these different views it must be borne in mind constantly that various writers may mean widely different things by the same term. Thus, when Emerson states that one-third of the children in this country are malnourished he means that this number are seven percent or more below the average weight for height by a given table of averages, while others may mean by the same term those children who are ten percent below the same standards or those children selected on the basis of a medical examination, or because of insufficient food, poor living conditions or disease.

Wile sums up these various opinions by the terse statement that in spite of these elusive technical definitions to all intents and purposes we now speak of nutrition as an index of health that good nutrition means health and poor nutrition means ill health, a truth to which we can all subscribe.

Whatever the interpretation given the terms and reports of various writers they need not affect the practical efforts toward child improvement.

Methods of judging nutrition:

The methods of judging nutrition vary with each group of workers and depends to a vast degree upon what each individual worker wishes to prove or from what angle he decides to judge nutrition.

At the present time there are no accepted methods for judging nutrition. However, malnourished children are selected usually because of being (1) underweight for height, (2) because of having had inadequate food or (3) on the basis of a medical examination.

Concerning the use of weight, height and age charts as a method of judging nutrition, we will agree that it serves as a very good guide in the detection of the condition but that it is only one of the factors to be used.

Emerson, who has been a pioneer in this work, uses the weight-height method exclusively in classifying children but it does not mean that he does not recognize other symptoms of poor nutrition. Quite the contrary is true, although he does not include the fat, flabby type of malnutrition. He states that he has never seen a child habitually seven percent below average weight where other signs of poor nutrition were not present.

His assumption that on the average the height of a child is approximately that which nature intended and the weight should correspond to it is a logical one. His views are further strengthened

by the work of Jackson on animals, wherein it was shown that nutrition affects weight quite markedly whereas it has but very slight influence on skeletal growth.

On the other hand, Taylor believes that the height-weight standards of judging nutrition have very little value. His arguments are that children are frequently slender because it happens to be an hereditary type just as it is hereditary for some to be stockier and heavier than the average. The point is not, he states, what the child weighs but whether the child is healthy. The test should not be a pair of scales but a proper medical examination which if normal must assure us that the child's weight is correct, no matter what it is and our work is merely to see that a child has a physical development corresponding to his type of build.

Granted that there might be less value in the height-weight standards than some workers give them, yet we must admit that noticing children's weight is a first step in calling parents' attention to the physical status of their children and gives them a basis for judgment and in this way it serves a great purpose.

Causes of malnutrition: These fall into two categories: (1) The direct causes and (2) the underlying causes.

The direct causes are the actual factors causing the malnutrition, such as faulty diet. This may be inadequate in kind, insufficient in amount or faulty in regard to dietary habits. Chief among these is the habit of inadequate breakfasts taken by the school child either because of hurry or wrong diet. The existence of such a condition was brought out strikingly in a recent survey in the Gary (Indiana) schools, where one-third of the children examined were undernourished as judged by inadequate breakfasts alone.

The second direct cause is that of physical defects such as infected tonsils and adenoids, carious teeth, heart disease and tuberculosis. While we must agree that physical defects may alter nutrition and growth, yet the defect must be of major importance to change it greatly. Infected tonsils and adenoids have, according to the work of Kaiser, very little effect on nutrition. In one group of twelve hundred malnourished school children with infected tonsils and adenoids only about ten percent were improved where operation was the only treatment for the malnutrition.

In another group of eight hundred children studied by Breeze and Hill it was concluded that there was no relation between malnutrition and the acute infectious diseases.

The third direct cause may be classed under faulty hygiene, such as too little sleep, over-exercise, chronic fatigue, lack of outdoor play and faulty posture.

A more modern direct cause must now be added to this list, that of the radio. It is not uncommon for school children to stay up several hours later

than formerly in order to listen to a favorite program, causing loss of sleep and predisposing to fatigue.

Seham has done a great deal of work among children who are chronically fatigued and malnourished. He is convinced that next to inadequate amount or kind of food over-fatigue accounts for many poorly nourished children.

The underlying causes of malnutrition are the home or community conditions, such as poverty, ignorance and lack of home control and are so obvious as to need no further comment.

Effects of malnutrition:

If nutrition of the child fails growth in some manner suffers, the most readily observed effect being in respect to weight. When the food supply is inadequate in amount or kind the weight increase falls below normal and if prolonged and of sufficient degree the fats and proteins of the body may be used to supply the energy for the body processes, the effects being visible outwardly in thinner bodies, sagging postures, etc.

It is reasonable to assume that short periods of under-nutrition may be made up entirely by the child and that the earlier the malnutrition is detected and corrected the greater will be the chances of a complete and permanent recovery. It is possible, however, that impaired growth or abnormal structure due to long neglected under-nutrition may never be compensated entirely.

Experiments have shown that the effect of malnutrition on height is less pronounced than that on weight and the skeletal length continues at the expense of the muscles and other tissues. The parents of the malnourished child usually are content to explain this lankiness and failure to gain in weight by the statement that he is growing so fast in height that he can't be expected to grow in weight.

Although of minor importance the effects of malnutrition on the appearance of a child cannot be overlooked. A thin, stunted, anemic, wing-shouldered child can never be considered other than pathetic.

Recent studies of Blunt and Wang on the effects of malnutrition on the basal metabolism of the child have shown definitely that underweights amounting to fifteen percent or more show a lowering of both basal metabolism and the total output of creatinin with loss of body proteins and depletion of body tissues, a condition potentially very serious.

The effect of malnutrition upon the nervous system has been studied carefully and the opinion that most of the neuroses of childhood, such as headaches, insomnia, disturbed sleep, chorea habit spasm and many others depend almost entirely upon disorders of nutrition.

The increased susceptibility of malnourished children to disease is the most commonly remarked effect of undernutrition and is a point upon which

most physicians are agreed and needs no further comment.

Effects upon mental ability: There can be but little doubt that the hereditary mental endowment of the child is the largest determining factor in his mentality, but on the other hand a child may be mentally inferior to what he should be because of malnutrition. Backward children in school cannot all be improved mentally by correcting the diet and undernourishment, but one must admit his chances for improvement will be greater after these corrections.

The work of Blanton, Termon and others has shown quite definitely that in the majority of cases the physically accelerated child is also the mentally accelerated child.

Treatment: It is obvious that any program to lessen malnutrition in our school children must stress prevention rather than cure. Such a program must include prenatal, infant and preschool care, as well as work with school children.

The importance of the prenatal period in the child's development and future status of health only recently has been appreciated. McCallem sums up this problem by this statement: "It is in prenatal life in great measure that the size of the fund of that something which we call vitality is determined, for it is then that the quality of the teeth, the skeleton and perfection of form are determined." Therefore, correct diet, exercise and adequate prenatal supervision for the mother is highly desirable.

The subject of care and feeding of infants during the past decade has progressed more rapidly than almost any other branch of the profession. In fact, so much so that now only the most ignorant classes fail to learn about the feeding of infants through almost every magazine and newspaper. Establishment of milk stations and feeding clinics have furthered this knowledge almost beyond comprehension. The value of correct diet during the first two years is so well known that it needs no comment here.

The period from two years to school age is perhaps the most precarious in childhood, insofar as nutrition is concerned. Parents who have fed children carefully until their second birthday often let down at this age, allowing the child freedom of eating, omit his nap periods and allow him to form likes for odd sorts of food. In other words, the child begins to shift for himself and arrives at school age showing the scars of malnutrition, physical defects, wrong habits of living in spite of the fine start he had during the first two years.

Carrying out such a preventative program up to school age presupposes parents, especially mothers, who are better trained for their jobs than most parents now are. Therefore, the education of both parents and teachers in the essentials of child care and training is one of the fundamental planks in the preventative program.

If such a preventative program has failed and the malnourished child does arrive at school, then it obviously will take the combined efforts of parents, teachers and the school health program to correct the defect. Otherwise, so many more dangers beset the child in school, such as inadequate breakfasts and lunches, hurried meals, the candy habit, late hours, over-exercise and over-stimulation, that he scarcely can hope to overcome them and they follow him through his entire school period into adult life.

The first step then in the treatment of the malnourished school child is to find its cause. This requires a complete medical examination to discover any clinical factors which may be alone or, in part, responsible and, in addition, a thorough study into the child's whole method of living, his diet, his sleep, exercise and all the varied factors listed as possible causes. In some cases no apparent cause is at first discovered and search must be carried further until it is found.

Having found the causes steps should be taken to remove them. Sometimes this is quite easy but more often the child's whole program of life needs to be reorganized completely.

Emerson urges the removal of all clinical causes first so that the child is rendered free to gain. While this is correct in theory yet practically it cannot always be done. Thus carious teeth and infected tonsils may be removed and the child made free to gain if these alone constitute the cause, but if the underlying cause is tuberculosis or a bad preschool feeding history or heart disease, then the child cannot be rendered free to gain although being able to do so would be ideal.

The treatment then sounds very simple: remove the removable causes, feed the child adequate amounts of proper food, give him suitable hours of rest and play and very shortly he will come up to the normal standards. Simple and easy as this sounds, yet it cannot be done in the majority of cases because it is impossible to provide the proper rest, right food and other required conditions owing to the underlying factors already mentioned, such as poverty, ignorance and lack of parental control.

The most efficient way we have to date for overcoming these difficulties is the establishment of preventatoriums, fresh air camps, nutritional classes and child health demonstrations wherein programs can be outlined, the children examined and the parents taught.

Thus it will be seen that it behooves all who are in any way responsible for the welfare of children to aid in the prevention and correction of malnutrition and thus raise for the benefit of mankind stable citizens of enduring and efficient capabilities and this can be done only in a far-reaching manner through the education of all the people as to the significance of the problem and enlisting the support of all those in any way in authority over children.

DIPHTHERIA TOXOID AS AN IMMUNIZING AGENT*

O. B. NESBIT, M.D.

PUBLIC SCHOOLS, GARY, INDIANA

During the five years prior to the beginning of immunization against diphtheria in Gary in 1924, there were 566 cases of diphtheria and 60 deaths reported to the health department. Since August, 1924, there have been 302 cases and 28 deaths reported.

During the fiscal year of 1929, not a death occurred and only 49 cases were reported.

During the past twelve months, thirty-three cases have been reported and three deaths have occurred. Neither of those who died had received any immunizing doses. Eleven of the cases were in pre-school age children; sixteen, among school children; and six were among adults. One school child, who had received three doses of diphtheria toxoid in January, 1929, was quarantined with a three-year-old sister who had developed diphtheria, from whom the mother contracted a severe case of the disease. The school child was given 1,000 units of diphtheria anti-toxin when the diagnosis was made in the baby. Four days later, the school child developed some constitutional symptoms and had a positive culture. She was given 10,000 units of anti-toxin, had no reaction, and had no further symptoms.

From August, 1924, until August, 1928, five thousand five hundred children were given 14,585 doses of diphtheria toxin-antitoxin. In 1928, two doses of diphtheria toxoid were given to each of 125 pupils, and sixty-seven percent were found to be negative to a Schick test which was given eight to ten weeks after the doses. In 1928 and 1929, three thousand seven hundred sixty-four doses of diphtheria toxoid were given, usually giving three doses of 0.5 cc., 0.5 cc., and 1 cc. In 1929 and 1930, three doses of 0.5 cc., 1 cc., and 1.5 cc. usually were given. First doses were given to 1,800 pupils; second doses, to 1,640; third doses, to 1,443; fourth doses, to 18; and fifth doses, to 14. The total doses given were 4,915.

Approximately 5,500 persons, principally school children, have received diphtheria toxin-antitoxin, and 3,300 persons have received diphtheria toxoid by school physicians. About 200 children have been immunized by other agencies and the family physicians. This gives approximately 9,000, principally school children, upon whom immunization has been attempted.

The toxoid has been given principally to children under eight years of age. Usually no test, neither Schick nor toxoid reaction test, is given before the doses. The reactions usually have been very mild. In the Horace Mann School 207 doses were given. Twelve pupils lost twenty-four and one-half days as a result of the doses. In Froebel School, where 1,232 doses were given, twenty-nine

*This is the sixth in the series of articles indorsed by the Diphtheria Prevention Committee of the Indiana State Medical Association.

pupils lost thirty-two days. An additional Froebel child, seven years old, was out fourteen school days with a badly swollen arm which was opened above the site of injection. The arm discharged freely for a few days, after which the arm rapidly became normal. She had received 0.5 cc. of toxoid. This child had received no serum, antitoxin, or toxin-antitoxin.

The nurse in Froebel School also received 0.5 cc. of toxoid. She had a Schick positive reaction. The control was negative. She had received diphtheria antitoxin during childhood and also during training. In addition, she had received two series of three doses each of toxin-antitoxin during the past six years. The arm was painful and badly swollen. She had a septic range in temperature, accompanied by a headache and a rapid pulse, a leukocytosis. Upon draining the arm, the temperature and symptoms subsided, to return again when the drainage was stopped; only to subside promptly again upon being opened. The writer now regards these as probable accidental infections and not reactions.

These cases are the only possibly infected arms that have resulted in all the immunization and testing during the six years. Burke¹⁰ reports "five abscesses following approximately 100,000 toxoid inoculations. In each case there was a history of injury."

Schick tests¹ given to 436 persons a few weeks after they had received three doses of toxoid in 0.5 cc., 0.5 cc., and 1 cc. dosage in 1927-28 showed

eighty-two percent negative. Tests given more than one year after doses to 283 who had received the same dosage of toxoid at the same time as the above group showed eighty-eight percent negative. This indicates that more develop than lose immunity after the usual few weeks. The department has found that the greatest number of negative Schick tests occur in three to six months after toxin-antitoxin doses.

The Schick test material used in 1930 died not contain any buffer.

From Schick tests given from April to June, 1930, to 597 persons who had received three doses of diphtheria toxoid (0.5 cc., 1 cc., and 1.5 cc.) between September, 1929, and February, 1930 (Table No. II) the Medical Department found fifty-eight (nine percent) positive or combined, and 539 (ninety-one percent) negative or pseudo.

The increase in the total dosage from 2 cc. to 3 cc. of toxoid appeared to increase the number of Schick negative persons within eight or ten weeks by about nine percent. Experience indicates that the larger dosage is preferable.

At Emerson School the 319 doses of toxoid which were administered caused a total loss of twelve days by four pupils. In Roosevelt Center the doses were given as the cause of absence by five pupils who lost a total of twelve days. In this center 351 doses had been given. From this it will be noted that the reactions generally are very mild.

TABLE NO. I
DIPHTHERIA CASES IN GARY, INDIANA, FROM SEPTEMBER, 1919, TO SEPTEMBER, 1930

| MONTH | 1929 TO 1930 | 1928 TO 1929 | 1927 TO 1928 | 1926 TO 1927 | 1925 TO 1926 | 1924 TO 1925 | 1923 TO 1924 | 1922 TO 1923 | 1921 TO 1922 | 1920 TO 1921 | 1919 TO 1920 |
|-----------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| September | 3 | 7 | 1 | 3 | 3 | 8 | 2 | 3 | 9 | 8 | 8 |
| October | 5 | 3 | 4 | 15 | 13 | 18 | 22 | 7 | 31 | 28 | 11 |
| November | 3 | 14 | 4 | 18 | 8 | 6 | 36 | 11 | 65 | 28 | 9 |
| December | 6 | 10 | 5 | 12 | 10 | 5 | 24 | 14 | 24 | 15 | 1 |
| January | 7 | 8 | 2 | 8 | 13 | 2 | 19 | 4 | 12 | 6 | 8 |
| February | 6 | 3 | 5 | 5 | 4 | 5 | 19 | 4 | 7 | 12 | 4 |
| March | 0 | 1 | 4 | 4 | 2 | 1 | 8 | 1 | 5 | 15 | 4 |
| April | 1 | 0 | 0 | 3 | 4 | 1 | 0 | 0 | 3 | 19 | 5 |
| May | 1 | 0 | 0 | 1 | 2 | 2 | 8 | 0 | 0 | 11 | 6 |
| June | 0 | 0 | 1 | 1 | 1 | 2 | 4 | 4 | 0 | 0 | 1 |
| July | 0 | 3 | 2 | 2 | 0 | 5 | 2 | 0 | 0 | 5 | 5 |
| August | 1 | 0 | 2 | 0 | 0 | 4 | 1 | 1 | 0 | 4 | 3 |
| TOTAL | 33 | 49 | 30 | 72 | 60 | 59 | 145 | 49 | 156 | 151 | 65 |

Total number cases September, 1919, to September, 1924—566. Deaths—60.

Total number cases, September, 1924, to September, 1930—302. Deaths—28.

Number of deaths in fiscal year of 1929—0.

School enumeration 1919 was 12,137.

School enumeration 1929 was 27,574.

School enumeration 1930 was 28,477.

U. S. Census of Gary 1930 was 100,749.

Among fifteen children who had received five doses of T. A. T., nine were positive and six were negative. Among forty-eight who had received six doses of T. A. T., sixteen were positive and thirty-two negative. Among three who had received eight doses of T. A. T., one was positive and two negative. Three had received nine doses of T. A. T. and all were negative. Twenty-one who had received three doses of T. A. T. and three doses of toxoid showed five positive and sixteen negative.

When Schick tests were given to 192 persons who had received three doses of diphtheria toxin-antitoxin between September, 1924, and June, 1927, eighty-one, or forty-two percent, were positive, and 111, or fifty-eight percent, were negative. These tests were given during the summer, 1930.

The percentage of negative reaction among pupils given Schick tests after having had T. A. T. has varied from sixty percent in 1927-28² to sixty-four percent during the years 1924-27, inclusive. Another calculation based upon 1,668 cases showed seventy percent negative. At no time have the results showed more than seventy-seven percent negative.

TABLE NO. II

(Result of Schick Tests Given Between April and June 15, 1930, After Immunizing Doses)

| DOSES GIVEN | Positive | Negative | PERCENTAGE | |
|--|----------------|--------------|------------|----------|
| | or Combined | or Pseudo | Positive | Negative |
| 3 Toxoid (½, 1, 1½cc.) Given between Sept., 1929, and Feb., 1930 | 58 | 539 | 9 | 91 |
| 3 Toxoid (½, ½, 1cc.) Given between Sept., 1928, and June 15, 1929 | 35 | 248 | 12 | 88 |
| 3 T. A. in 1924 to 1927 | 81 | 111 | 42 | 58 |
| 5 T. A. _____ | 9 | 6 | 60 | 40 |
| 1 T. A. _____ | 2 | 0 | | |
| 2 T. A. _____ | 2 | 5 | | |
| 4 T. A. _____ | 1 | 1 | | |
| 6 T. A. _____ | 16 | 32 | | |
| 8 T. A. _____ | 1 | 2 | | |
| 9 T. A. _____ | 0 | 3 | | |
| 2 T. A. and 3 Toxoid | 0 | 4 | | |
| 3 T. A. and 1 Toxoid | 1 | 1 | | |
| 3 T. A. and 2 Toxoid | 2 | 3 | | |
| 3 T. A. and 3 Toxoid | 5 | 16 | | |
| 6 T. A. and 1 Toxoid | 1 | 0 | | |
| 3 T. A. and 6 Toxoid | 0 | 1 | | |
| 1 Toxoid _____ | 3 | 4 | | |
| 2 Toxoid _____ | 22 | 43 | | |
| 4 Toxoid _____ | 2 | 8 | | |
| 5 Toxoid _____ | 2 | 20 | | |
| 6 Toxoid _____ | 1 | 19 | | |
| 7 Toxoid _____ | 0 | 2 | | |
| 2 Toxoid and 2 T. A. | 1 | 0 | | |
| Miscellaneous _____ | 9 | 11 | | |
| (Dosage unknown) | | | | |
| TOTAL _____ | 355 | 1079 | 24 | 76 |

NOTE:—A group of colored pupils tested resulted as follows:

| | Positive | Negative |
|-----------------------------|----------|----------|
| After 3 toxoid (29-30)..... | 16 | 64 |
| Aetfr 3 toxoid (28-29)..... | 4 | 9 |
| After 3 T. A. | 5 | 3 |
| Other doses | 5 | 11 |
| TOTAL | 30 | 87 |

The children who have had T. A. T. or toxoid generally are escaping diphtheria. Because more persons are immunized and less reactions occur with the same number of doses, the use of toxoid is more desirable than T. A. T. There should be no danger of tissue sensitization.

"In Paris³ and in a great number of cities vaccination is carried out in an organized method. * * * The standard technique is still the same, namely: an injection of 0.5 cc.; after three weeks, a second injection of 1 cc.; and two weeks later, a third injection of 1.5 cc." The number of vaccinations with anatoxin (toxoid) in France up to the end of the first half of 1929 was 850,000.

In a letter to the writer under date of July 31, 1930, Doctor Ramon states that "actually more than three million injections have been made in France without accident."

"In the pre-school child, toxoid⁴ obtained from reliable sources offers the ideal method of diphtheria immunization, because (a) it gives a greater percentage of immunes than does toxin-antitoxin, and (b) it avoids serum sensitization."

These questions arise in the mind of the writer: (1) Why is toxoid being put on the market in two-dose packages, which, according to the experience of the Medical Department, renders only sixty-seven percent Schick negative?⁵ (2) Why has the biological manufacturer been permitted to deviate from the dosage recognized by Ramon and his associates as the best suited for immunization, viz: 0.5 cc.—1 cc. and 1.5 cc., a total of three cc.? (3) Is the U. S. Hygienic Laboratory or the manufacturer responsible?

Whenever retests after T. A. T. have been given with good test material and properly interpreted, the percentage of Schick negatives has been disappointing. In Milwaukee,⁴ only sixty-two percent to eighty-five percent were found negative. In Cook County Hospital (Chicago), 67.2 percent of the nurses who had received T. A. T. were positive, according to Rhodes.⁶ Harrison¹⁴ reports sixty-four percent negative.

The conclusions of G. F. and Gladys H. Dick⁷ that three doses of anatoxin (toxoid) as prepared by Ramon in the dosage recommended by him is a better immunizing agent than five doses of T. A. T. have the support of the writer. The fact that toxoid is a superior agent was confirmed by Weinfield and Cooperstock⁸ and by Harrison,¹⁴ who have found that two cc. immunizes ninety-five percent.

The fact that 322 school children at South Bend,⁹ given Schick tests after having received toxin-antitoxin, were all negative was an indication that the test material was not of standard quality, or that the tests were improperly interpreted, if the medical department of the Gary schools is a valid criterion.

For those unfamiliar with diphtheria anatoxin (toxoid) one may refer to Ramon and Helie,¹¹ to Moloney's article,¹³ and to Thompson.¹²

The plan followed in Gary last year is described by Doctor Thompson.¹² The same plan will be followed during next year; however, during the coming year, 1930-31, there will be less retesting after doses and less attention will be paid to those over eight years of age than has been done in the past. All apparently well children between the ages of six months and eight years will be given these doses: first, 0.5 cc. of diphtheria toxoid; second, twenty-one days later, 1 cc.; third, two to three weeks after the second dose, 1.5 cc. If any of the doses should produce a severe reaction, the size of the next dose might be varied from the above.

If the department, during the coming year, is requested to give doses to those over eight, in each case a Schick test will be given and the "control" will be used to determine whether or not to give toxoid, the strength of the dosage, and the number of doses of toxoid to be given. Those having a negative reaction to the test will not be given immunization.

The package of choice is the rubber stoppered thirty cc. bottle which is kept in a refrigerator at a temperature of below fifty F. when not in use. Such a package permits varying of the doses without loss of material and at a minimum cost.

It is essential that some agency check more closely on the potency of biological test and immunizing material as evidenced by the findings of Rhodes⁶ and Harrison.¹⁴ Until then, preparations from only reputable manufacturers should be used.

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HYPOTHYROIDISM*

CHARLES R. SOWDER, M.D.

INDIANAPOLIS

During the past four and a half years I have observed a group of cases presenting an interesting study from the standpoint of diagnosis and treatment.

In reviewing the literature on diseases of the thyroid gland I was surprised at the paucity of information on this particular phase of thyroid function. The work of Means and Richardson—"Diseases of the Thyroid"—(*Oxford Monograph*, 1929) makes no mention of this type of cases.

At a joint meeting of St. Vincent's Hospital Staff and the Indianapolis Medical Society, May 15, 1928, I reported a series of sixty-nine cases observed in private practice over a period of two and a half years, and since this report was made an additional forty cases have been observed.

In this series of more than 100 cases the basal metabolic rate varied from minus-twelve to minus-thirty percent. The ages varied from sixteen to seventy years. Females constituted sixty percent of the series. All cases of hypothyroidism following partial thyroidectomy and all cases belonging to frank myxœdema, cretinism and hypothyroid obesity are excluded from the group.

These cases presented a variety of symptoms, the most constant being fatigue and lassitude, increasing as the day wore on and approaching, in some cases, sheer exhaustion by late afternoon. The great majority of them had a feeling of restlessness and indecision, irritability, emotional states, change of personality, dread and apprehension, insomnia; and, next to fatigue, the most constant complaint was that of an inward nervousness. Extreme nervousness occurred in two of the group, who had attacks in which they were seemingly unable to move, and with a sense of oppression and a feeling of impending disaster, with a tendency to cry without cause.

A few cases showed a distinct change in temperament and personality, with loss of memory. A gross tremor was present in a few cases. Practically all cases had a rapid exhaustibility of muscle with breathlessness on exertion. Tachycardia was present in a small percentage of the cases, but lowered blood pressure and a slowing of the pulse was the rule. Practically all cases showed increased reflexes. There was a heaviness and clumsiness of movement. The skin in some instances was dry, especially the palms of the hands, and patients gave a history of infrequent sweating. A very few were conscious of and complained of low temperatures. Body temperatures as a rule were sub-normal.

The blood picture in these cases varied little from normal in the number and shape of the red cells and in hemoglobin. The leucocyte count in the majority of cases was within normal limits as to number but with a relative increase in the

*Condensed report given for the Indianapolis Medical Society and staff of St. Vincent's Hospital, May 15, 1928.

small lymphocytes. Blood chemistry was normal. Urines were normal but with more than the usual number of cases showing four-plus indican. Syphilis did not enter as a causal factor. No myocarditis or tuberculosis were present.

Treatment of these cases consisted of the administration of thyroid, not exceeding two grains daily the first week or until the body mechanism became accustomed to the increased metabolism, and it is rarely necessary to exceed three to four grains daily and that for a limited period. Co-existent or following the thyroid medication, small doses of either Lugol's solution, three to five minims daily, or one dram daily of U. S. P. Syrup of Hydriodic Acid should be given. One case has required seven to fifteen grains daily of desiccated thyroid for the past three years, but this is quite unusual.

Three cases in the series were made worse by thyroid therapy, and the symptoms with lowered metabolism were due to other factors than the thyroid.

The basal rate in suspected cases of hypothyroidism should be taken by having the patient do without breakfast. Arriving at the laboratory the patient should lie quietly for an hour before the reading is taken. It is preferable to have the readings taken by laboratory assistants in a hospital, although where not available they may be taken in a private office or laboratory. This regime precludes a lowered rate from prolonged rest.

These cases do not belong to an already classified group such as those of myxœdema, cretinism and obesity. They are of such frequency as to merit further study, and the results of treatment are so gratifying to both patient and physician as to arouse interest in a seemingly neglected field of clinical medicine.

Patients presenting two or more of the symptoms enumerated should have the benefit of laboratory study to aid in the diagnosis. I believe that a great many neurasthenic cases will be found suffering from a lack of thyroid secretion.

Hypothyroidism would seem to be scarcely the appropriate name for the condition. It is undoubtedly a polyglandular deficiency, the outstanding feature of which is a lack of thyroid as is shown by the rapid improvement which takes place following its administration.

DIABETIC COMA AND DEATH (An Unusual Case)

A. F. KNOEFEL, M.D.

M. C. TOPPING, M.D.

TERRE HAUTE

Patient, Mrs. H., housewife, age thirty-eight. No children, no miscarriage and denies venereal infection. Maternal aunt died of diabetes, otherwise family history negative.

On February 7, 1930, patient began complaining of headache, drowsiness, shortness of breath,

and sore throat. She was brought to the office by her husband and there minimized her symptoms. At this time there was no history of previous illness obtained.

Examination was essentially negative except for hypertrophic and infected tonsils, and a slight downward displacement of the apex beat, with a soft blowing systolic murmur heard best over the apex and transmitted to the axilla. An anodyne was prescribed for headache and patient advised to remain in bed. The following morning she felt much better but remained in bed. On the second morning or on February 9th, however, she felt much worse, complaining of severe frontal headache, abdominal soreness, nausea, and vomiting. At 8:00 a. m. she became suddenly semicomatose and irrational and was moved to the Union Hospital.

Additional History (from husband): No childhood diseases except scarlet fever at the age of five. For past six months patient gradually has lost ten pounds. Her appetite has been extremely poor for past five days, but was normal before. She has been drinking water freely and complaining of thirst. Does not use tobacco or alcohol. Is highly emotional and has an unstable nervous system.

Physical examination at hospital reveals a well-developed but poorly nourished white female about thirty-five years of age, semicomatose, irrational, disoriented, and trying to get out of bed. She presents, at times, the picture of an acute mania. Temperature, 101 $\frac{2}{5}$ (R); pulse, 96; respiration, 36; blood pressure, 130/80.

Skin: Smooth, white, unblemished, practically no perspiration.

Head: Hair is thick and glossy. Scalp presents no abnormalities.

Eyes: Pupils, equal, react to light and accommodation, no nystagmus, conjunctivæ clear. Eye grounds show no abnormality. Intraocular tension slightly decreased.

Ears: No discharge. Membrana tympani normal in appearance.

Nose: No obstruction. No discharge.

Mouth: Lips dry, sordes.

Teeth: None missing or devitalized, no caries or pyorrhea.

Tongue: Slightly coated, moist, pink, no tremor or deviation.

Throat: Pillars are slightly injected. Tonsils large, pus may be expressed from each.

Neck: No deformity or rigidity. Bilateral palpable post-cervical lymph glands. Thyroid small, smooth, freely movable.

Chest: The lung fields are resonant throughout. Breath sounds are clear.

Heart: Apex in sixth interspace about 7 cms. to the left of the midsternal line. Right heart border is behind the sternum by percussion. There is no widening of great vessel dullness. There is a soft blowing systolic murmur heard

best over the apex and transmitted to the left axilla. P_2 is slightly accentuated. The rate is moderately fast but the rhythm is regular.

Abdomen: Patient resists palpation of abdomen apparently because of generalized abdominal tenderness. No tumor masses found and no marked rigidity.

Genitalia: External genitalia normal in appearance. Orifice small, admitting two fingers with difficulty. The uterus is small, almost infantile, but is in the normal antiflexed position. The cul de sac is free from tumor mass.

Back: Contour normal, no rigidity.

Extremities: No deformity, no evidence of paralysis or vasomotor pathology.

Neurological: Tendon reflexes diminished uniformly. Babinski and Kernig negative. No disturbance of sensation. No tremor.

Laboratory Findings: Urine, Specific gravity 1.002. Reaction, acid PH 3.0. Albumen, negative. Sugar, trace. Acetone, four-plus. Diacetic acid, four-plus. Indican, negative. Bile, negative. Microscopic, negative.

Blood: Hemoglobin, ninety-eight percent. Red cells, 4,900,000. White cells, 9,000. Differential, normal. Blood sugar, twelve. Blood urea, fifteen. Widal, negative. Sedimentation time, one hour, forty-five minutes. Kahn, negative.

Stool: Negative for blood, parasites and typhoid bacilli.

Course and Treatment: Fifty units of Iletin (U-80) were administered subcutaneously every two hours, and two ounces of sweetened orange juice were given by mouth every hour. Intravenous injection of 1,000 cc. of normal saline solution containing fifty gm. of glucose were given approximately every twelve hours. During the first twenty-four hours the patient had taken a total of 350 units of insulin and about thirty-two ounces of orange juice, which was retained, and had had 2,000 cc. of normal saline solution with 100 gms. of glucose intravenously. She also had four grains of sodium luminol intravenously and repeated colonic lavage.

A catheterized specimen of urine was examined for sugar and acetone every two hours, and a blood sugar estimation made every twelve hours. In spite of the intensive treatment with insulin, carbohydrates, and liquids, the urinalyses revealed moderately large amounts of both sugar and acetone during the first twenty-four hours, and the blood sugar level was slightly raised. However, in thirty-six hours, the urine became sugar and acetone free, the blood sugar dropped to ten, the patient regained consciousness, became rational, oriented, and stated that she felt very much better. The insulin dosage was cut to 100 units a day in two doses of five-eighths the total dose in the morning and three-eighths the total dose in the evening. A 2,000 calorie diabetic diet, with two parts carbohydrate to one part fat, was instituted.

During the next twenty-four hours the patient's

general condition continued excellent, but on the third day there was a sudden recurrence of the original symptoms with the reappearance of large amounts of sugar and acetone in the urine. The primary treatment was reinstituted without effect. In addition, oxygen was administered, and the respirations were stimulated with caffeine and sodio-benzoate hypodermatically. The temperature gradually arose to 105 $2/5$ (R), the respirations became Cheyne Stokes in character, the pulse imperceptible, and the patient died within eight hours following the return of acidosis. Permission to perform an autopsy was denied.

Summary: This case was unique in that it presented a picture of a sudden acidosis of undetermined etiology, there having been no symptoms in the present history sufficiently indicative to justify the diagnosis of uncomplicated diabetic coma. There was a temporary alleviation of the condition following intensive insulin therapy, only to be followed by a relapse into a more severe and terminal state.

TREATMENT OF GENERAL PARALYSIS

(A comparison of eighteen cases of general paralysis treated with induced tertian malaria, arsenicals, and mercury; with the same number of cases treated with arsenicals and mercury.)

OTHO R. LYNCH, M.D.

DENNIS E. SINGLETON, M.D.

LOGANSPOUT STATE HOSPITAL

A discussion of the different methods of treatment of general paralysis will not be undertaken. From the extensive literature on the subject it is obvious that writers of large experience differ considerably in their opinion as to treatment. Induced tertian malaria has been used extensively for the past few years, with apparently satisfactory results by many competent physicians, while others do not recommend this treatment and believe that best results are obtained from arsenicals and mercury.

It is realized that a comparison of eighteen cases is not conclusive, but inasmuch as the cases have not been selected, and the length of time under treatment has been practically the same, and other important factors; viz., the duration, stage of disease, mental and neurological findings not being considered in the choice of treatment, it is believed that something of value may be gained even from this limited number. The average age of the eighteen cases treated with malaria, arsenicals, and mercury was 39.6 years. The average age of the eighteen treated with arsenicals and mercury alone was 44.6 years. This difference in age was purely accidental. There were five more females treated with arsenicals and mercury than were given malaria. It is not believed that the factor of sex has been of any significance as to results.

These cases were under treatment and observation from July 1, 1928, to September 1, 1929. One or more serological examinations were made of the entire group under treatment.

All the cases had been diagnosed general paralysis, the diagnoses being made by the usual mental, neurological, and laboratory findings. They were all definitely psychotic, and committed in the usual manner except one voluntary commitment who had had extensive treatment with mercury and arsenicals for about two years. Only two of the cases in this series had had any previous treatment.

The usual technique was followed in the administration of tertian malaria. Inoculation was done by both the intravenous and subcutaneous methods. The incubation period varied from two days by intravenous inoculation to thirty days by the subcutaneous method. The average incubation period by intravenous inoculation was eight days, and by the subcutaneous method fourteen days. The average number of chills were eight. In four cases the chills terminated spontaneously. One case had fourteen chills, having two after quinine had been administered. The highest temperature recorded in any case was 107 degrees Fahrenheit. The average height of temperature was 105.2 degrees Fahrenheit. The chills varied greatly in length of time and severity in different cases and also in the same case. In a few cases it was barely noticeable and lasted from ten to twenty minutes. In others it lasted as long as forty-five minutes, with marked shaking and pallor. The highest temperature was usually recorded in about one hour after the chill had subsided, remaining at its height from one-half to one and one-half hours and gradually subsiding. The average febrile state was about five hours. No serious complications occurred except in two cases. One died in a convulsion after the fifth chill. The temperature of another after the fourth chill remained 105 degrees for twelve hours and the pulse became intermittent and weak. The infection was terminated promptly by ten grains of quinine.

Herpes labialis occurred in practically every case. Jaundice was observed in about fifty percent, this being noticeable in the sclera and in a few cases was general. There was enlargement of the spleen noticed in four cases.

Infections were terminated promptly in all cases but one by the oral administration of five grains of quinine three times daily for three days, and three grains daily for three additional days. In one case a chill occurred after the quinine administration.

Two cases terminated fatally. One died suddenly during a convulsion following the fifth paroxysm. This case was the expansive manic type, very disturbed and restless. There was no history of previous convulsions. The other case appeared to be improved for six weeks after the termination of the chills. He then became dis-

turbed, restless day and night, ate poorly, lost rapidly in weight, and soon became bedfast. He died of hypostatic pneumonia. Unfortunately postmortems were not done on these two fatal cases.

Arsenicals and mercury were given from one to three weeks after the termination of the chills and continued with exception of brief intervals.

Neoarsphenamine and sulpharsphenamine have been used in both series in the same number of cases, and the same doses have been given at weekly intervals. Mercury salicylate has been employed exclusively, given at weekly intervals. The results have been practically the same with the two arsenicals, so much so, in fact, that a choice could not be made.

No deaths have occurred from the cases that did not receive malaria. The one case classified as greatly improved has been discharged and is now, after four months, managing his business affairs successfully. His blood and spinal fluid Wassermann is negative. One case classified as improved is serologically negative and has shown a marked mental improvement, but still has memory and retention defects. However, he probably will be furloughed in the near future. The remaining four classified as improved are well adjusted hospital patients and engaged in some useful occupation. Of the twelve cases classed as unimproved, four have deteriorated definitely, and eight remain unchanged.

In the malaria group the four classified as greatly improved have been furloughed. Two are engaged in their former occupations and two have not been heard from. Three were entirely negative serologically when furloughed and in one the blood was two-plus. All of the seven classified as improved are engaged actively in some hospital activity and making satisfactory progress. Three of the five classified as unimproved show deterioration.

The comparative serology is shown in the tables. Group number one shows the results of cases treated with malaria, arsenicals, and mercury. Group number two shows the results of cases treated with arsenicals and mercury. Unfortunately the cell count and globulin reaction were not made routinely.

GROUP 1

CASES TREATED WITH MALARIA

| | No. of Cases | Percent. |
|-----------------------|-----------------|----------|
| Clinical Results: | | |
| Greatly improved..... | 4 | 22.22 |
| Improved | 7 | 38.89 |
| Unimproved | 5 | 27.78 |
| Died | 2 | 11.11 |
| <hr/> | | |
| Total | 18 | 100.00 |
| Blood Wassermann: | | |
| Unchanged | 12 | 66.67 |

| | | |
|--------------------------|----|--------|
| Negative | 6 | 33.33 |
| Total | 18 | 100.00 |
| Spinal Fluid Wassermann: | | |
| Unchanged | 11 | 61.11 |
| Negative | 7 | 38.89 |
| Total | 18 | 100.00 |
| Colloidal Gold Curve: | | |
| Unchanged | 6 | 33.33 |
| Modified | 12 | 66.67 |
| Total | 18 | 100.00 |

GROUP 2

CASES TREATED WITH ARSENICALS AND MERCURY

| | No. of Cases | Percent. |
|--------------------------|-----------------|----------|
| Clinical Results: | | |
| Greatly improved | 1 | 5.55 |
| Improved | 5 | 27.78 |
| Unimproved | 12 | 66.67 |
| Total | 18 | 100.00 |
| Blood Wassermann: | | |
| Unchanged | 9 | 50.00 |
| Negative | 9 | 50.00 |
| Total | 18 | 100.00 |
| Spinal Fluid Wassermann: | | |
| Unchanged | 16 | 88.89 |
| Negative | 2 | 11.11 |
| Total | 18 | 100.00 |
| Colloidal Gold Curve: | | |
| Unchanged | 11 | 61.11 |
| Modified | 7 | 38.89 |
| Total | 18 | 100.00 |

SPECIAL ARTICLE

DIPHThERIA DEATHS FOR
AUGUST, 1930

Lawrence county sends us bad news this month. Four deaths in one month from a county of that size is far too many. They now have six deaths for the year and their computed rate is going to excessive. In the entire state there were 11 deaths from diphtheria in August. Clark county, 1; Hamilton county, 1; Lake, 2; Lawrence, 4; Marion, 2, and Miami, 1. Hamilton and Miami counties are entering the black list for the first time.

Schools have begun and that means that diphtheria will increase. The four biggest months are to come — September, October, November and

December. Deaths by months so far this year run as follows:

| | |
|----------------|----|
| January | 18 |
| February | 19 |
| March | 5 |
| April | 7 |
| May | 4 |
| June | 3 |
| July | 7 |
| August | 11 |
| Total | 74 |

We are going to have to keep right on our toes if we stay under the number for last year (158) which was the lowest number of deaths for any year since records have been kept.

Morbidity reports (cases) have consistently run lower this past summer than the year before but we are strongly inclined to think that these reports are far from accurate. During August, for example, Lawrence county reported one case (one other was reported for the week ending July 19) and four deaths. Something is rotten in Denmark. Why were those cases missed? That is something for the county health officer and the attending physician to answer. In the same month Marion county reported six cases and two deaths—a case mortality of 33 per cent if we may believe the records.

| | Total for 1930 | August | | Total for 1930 | August |
|----------------|----------------------|--------|------------------|----------------------|--------|
| Allen | 2 | 0 | Miami | 1 | 1 |
| Clark | 4 | 1 | Monroe | 3 | 0 |
| Clinton | 1 | 0 | Montgomery | 1 | 0 |
| Delaware | 2 | 0 | Morgan | 1 | 0 |
| Dubois | 1 | 0 | Perry | 1 | 0 |
| Elkhart | 2 | 0 | Randolph | 1 | 0 |
| Greene | 1 | 0 | St. Joseph | 2 | 0 |
| Hamilton | 1 | 1 | Sullivan | 2 | 0 |
| Howard | 1 | 0 | Tippecanoe | 1 | 0 |
| Jay | 1 | 0 | Tipton | 2 | 0 |
| Gibson | 1 | 0 | Vanderburg | 4 | 0 |
| Knox | 5 | 0 | Vigo | 1 | 0 |
| Lake | 11 | 2 | Warrick | 1 | 0 |
| Laporte | 1 | 0 | Wayne | 1 | 0 |
| Lawrence | 6 | 4 | White | 1 | 0 |
| Marion | 11 | 2 | | | |
| | | | Totals | 74 | 11 |

Sixty-one counties in the state (which is two-thirds of them) have not had a death so far this year. If the population of the various counties is considered, those with excessively high rates are Lawrence, Knox, Clark, Monroe and Lake.

THURMAN B. RICE, M.D.,
Chairman,
Diphtheria Prevention Committee.

THE State Board of Health, the State Board of Medical Registration and Examination, and the medical department of the Indiana University each have received an invitation to conduct a department in THE JOURNAL entirely devoted to the work of those organizations, with the idea of acquainting the medical profession of the state as to what is being done and to encourage more cooperation and coordination between the medical profession and those enterprises. Let's get together.

THE JOURNAL*of the***Indiana State Medical Association**

Devoted to the Interests of the Medical Profession of Indiana

ALBERT E. BULSON, M.D., Editor and Manager

Office of Publication, 406 W. Berry St., Fort Wayne, Ind.

OCTOBER, 1930

EDITORIALS**THE FORT WAYNE SESSION**

Good scientific programs, excellent entertainment, cordial hospitality, and an unusually large registration combined to make the Fort Wayne session one of the best in the long history of the Indiana State Medical Association. The program was condensed into two days, and there was action for everyone every minute from the time registration opened at the headquarters, the Anthony Hotel, on Wednesday morning, until Dr. Angus C. McDonald of Warsaw, president of the Association, bade everyone a good-bye at the close of the large public meeting in the Shrine Auditorium Thursday evening which wound up the eighty-first annual session.

In between times the House of Delegates found time, despite the many outside attractions, to elect unanimously Franklin S. Crockett, of Lafayette, president-elect (for 1932) and choose Indianapolis for the next convention city. Plans calling for a full three-day Hoosier program already have been placed before the Council of the Association by Dr. A. B. Graham, president-elect, who will preside over the destinies of the Association next year. Other officers in addition to Doctor Crockett were elected as follows: Dr. William A. Doepers, of Indianapolis (re-elected), treasurer; Dr. David Ross, of Indianapolis (re-elected), and Dr. Charles N. Combs, of Terre Haute, delegates to the American Medical Association for the next two years; Dr. Robert M. Moore, of Indianapolis, and Dr. R. L. Sensenich, of South Bend, alternates.

The election of the following councilors was ratified by the House of Delegates: Dr. H. C. Wadsworth, of Washington, Second District; Dr. O. O. Alexander, of Terre Haute, Fifth District; Dr. M. A. Austin, of Anderson, Eighth District, and Dr. E. O. Harrold, of Marion, Eleventh District.

The three sections of the Association elected officers with the following results:

Section on Ophthalmology and Otolaryngology: Dr. F. V. Overman, of Indianapolis, chairman; Dr. H. A. Kuhn, of Hammond, vice-chairman; and Dr. C. A. Robison, of Frankfort, secretary.

Section on Surgery: Dr. W. E. Tinney, of Indianapolis, chairman; Dr. E. Vernon Hahn, of

Indianapolis, vice-chairman, and Dr. George A. Collett, of Crawfordsville, secretary.

Section on Medicine: Dr. Harvey L. Murdock, of Fort Wayne, chairman; Dr. Herman M. Baker, of Evansville, vice-chairman, and Dr. B. G. Keeney, of Shelbyville, secretary.

The organization of a new society to be known as the Woman's Section of the Indiana State Medical Association was perfected at a meeting of women physicians of the state held following a banquet in their honor at the Fort Wayne Woman's Club. The president of the new organization is Dr. Nettie Powell, of Muncie. The other officers elected are: Dr. Kathryn Whitten, of Fort Wayne, vice-president, and Dr. Bonnell Souder, of Auburn, secretary-treasurer.

Mrs. A. C. Clauser, of Delphi, was elected president of the Woman's Auxiliary to the State Medical Association. Mrs. William Barnes, of Evansville, was elected secretary, and Mrs. J. E. Freed, of Terre Haute, treasurer. Mrs. M. A. Austin, of Anderson, presided at the meeting of the Auxiliary, at which Dr. Albert E. Bulson was the speaker, and at which Mrs. William S. Tomlin, of Indianapolis, the president-elect, was present.

Despite the rain, the financial depression, and the fact that several other state societies have reported a decrease in attendance at their annual sessions this year over previous years, the total registration at Fort Wayne was 1,115. Of this number 734 were physicians, the rest of the number being guests.

Overcast skies and soggy fairways did not dampen the ardor of the golfers who turned out at seven o'clock (which was six o'clock for most of the shooters who play on standard time) and played eighteen holes over the beautiful course at the Fort Wayne Country Club. More than 150 attended the golfers' luncheon as guests of the Lincoln Life Insurance Company, at which Dr. Robert R. Acre, of Evansville, was crowned champion for 1930, having won the Armstrong challenge trophy which goes for low gross, while Dr. F. L. Pyke, of Lafayette, captured the new Lincoln Life trophy which is to be presented each year to the low net shooter. Arrangements for the golf tournament were in charge of Dr. B. W. Rhamy, general chairman of the Golf Committee, the Prize Committee being in charge of Dr. A. F. Hall and Dr. J. M. Pulliam.

Dr. E. E. Padgett, chairman of the Council, called that group to order at 11:15 o'clock at a luncheon business meeting at which all of the State Association officers and all but two of the thirteen councilors were present.

From the time registration opened on the mezzanine floor the rooms containing the scientific exhibits and the booths containing the commercial exhibits were crowded with visitors. After a fine afternoon scientific session at which William J. Hosey, mayor of Fort Wayne, was introduced to the physicians by Dr. H. O. Bruggeman, of Fort

Wayne, councilor of the Twelfth District, and at which Doctor McDonald read his president's message that is printed in other pages of *THE JOURNAL*, the entire Association, physicians, their wives and guests, were delightfully entertained at the Shrine Auditorium by RKO vaudeville artists. The large auditorium was packed, and seldom if ever has the Association been treated to two and one-half hours of more joyous entertainment of clever dialogue, snappy dancing and good singing. This entertainment was arranged under the direction of Dr. Albert E. Bulson, chairman of the local entertainment committee. On behalf of the Fort Wayne Medical Society, Dr. C. J. Rothschild, the president, invited the physicians and their wives to the Chamber of Commerce, where an informal reception was held for President McDonald and President-elect Graham immediately after the show. This was a most pleasing occasion.

The Thursday morning section meetings and the Thursday afternoon general meeting were well attended, and, while the physicians were in session the wives and daughters had a breakfast, an Auxiliary meeting, a trip through the city, and a luncheon at the Fort Wayne Country Club, all under the capable direction of Dr. Jessie C. Calvin, chairman of women's entertainment. J. Ray Schomp, manager of the Conventions Division of the Chamber of Commerce of Fort Wayne, was in charge of the women's tour and also took general charge of registration.

Thursday noon, class reunions, fraternity get-togethers, under the direction of Dr. L. P. Harshman, and military service luncheons arranged by Dr. L. T. Rawles, gave opportunity for many doctors to gladhand and talk over old times.

No sooner had the physicians finished their Thursday afternoon scientific meeting than cars, both motor and interurban, took them out to the Irene Byron Hospital for dinner and an inspection tour of the hospital. Almost three hundred physicians, their wives and guests made the trip, which was in charge of Dr. Harvey L. Murdock, returning to hear Dr. Arthur J. Cramp, of Chicago, director of the Bureau of Investigation of the American Medical Association, and Dr. G. W. Dyer, professor of economics, Vanderbilt University, Nashville, Tennessee, address the public meeting. Doctor Cramp talked upon advertisements of quack doctors and patent medicines, and Doctor Dyer spoke upon the constitution and government. At all times the Fort Wayne physicians acted as a general committee on reception, Dr. Don F. Cameron being in charge of the General Reception Committee. The arrangements for the speaking rooms were superintended ably by Dr. A. O. Truelove.

Among the outstanding actions taken by the House of Delegates were:

- (1) Adoption of the committee report of the laboratory men and the Indiana State Board of Health in regard to eliminating **free laboratory**

service by the State Board of Health for those who are able to pay.

- (2) The rejection of a full-time health officer resolution.

- (3) The approval of the work done by the Fact Finding Committee appointed by Governor Leslie to survey the tuberculosis situation in Indiana in view of determining the best possible locations in the state for sanatoria for the treatment of this disease.

In closing, the State Association, on behalf of every member who attended the meeting, wishes to compliment and express its appreciation to Dr. Miles F. Porter, Sr., general chairman of the Arrangements Committee, who so ably directed the local arrangements for the meeting. It was a fine party and everybody had a good time, for which the State Association gives a vote of thanks to every Fort Wayne physician and his wife for their cordial hospitality and sincere friendliness.

THOS. A. HENDRICKS,
Executive Secretary.

RELIEVING THE PAIN OF CHILDBIRTH

If one were to judge from a recent article in *The Ladies' Home Journal* on this subject, and from the discussion and inquiries it has produced, we would be led to believe that the facts have been slow to reach both the lay public and the medical profession. The article referred to comes from a lay writer who has had children under the influence of "twilight sleep," but who has awakened only very recently to the fact that a far safer method is now in use. She has discovered that "twilight sleep" as such is quite dangerous for babies and not without danger to mothers, and that doctors in general have abandoned its use. Nevertheless, it would seem that medical men, especially those doing obstetrics in connection with general practice, are overlooking the fact that other means of alleviating childbirth pains are available which are entirely practical and safe.

The so-called "Gwathmey Technique," or rectal analgesia, has now stood the rigid test in many thousands of cases in our leading maternity hospitals and is considered a very valuable asset to the obstetrician's armamentarium. Gwathmey and obstetric leaders throughout the world have reported many series of thousands of cases where rectal analgesia has been used without a maternal death and with no fetal deaths attributable to the procedure.

Rectal analgesia must not be confused with rectal anesthesia. The latter has been tried, but not with so high a percentage of good results and not entirely without unfavorable results. When rectal analgesia first was offered to the profession, there were many objectionable features, among them being the fact that the ether-quinine-oil mixture when carried in ordinary bottles often lost much of the ether through evapora-

ation, and sometimes the cork was blown out of the bottle and the contents of the physician's bag was soiled by this mixture. One of the physicians connected with the obstetrical department of the Indiana University School of Medicine developed a container in which the ether-oil mixture was sealed, ready for administration. This outfit also contained a rectal tube and atomizer bulb which enabled the obstetric attendant to carry all that was needed in a very compact package. These outfits are now available to the profession at very small cost. Quite recently another member of the obstetrical department of the Indiana University School of Medicine, working at the Coleman Maternity Hospital, Indianapolis, has developed another very practical and simple apparatus which greatly facilitates the administration of rectal analgesia. The method has been developed to the point where it is very safe and convenient for use in any possible environment. It is not necessarily a hospital procedure. It can be used in any place where obstetrics is being done, and constant attendance of the physician is not required after its use. It is especially indicated in the protracted labors, and in those labors where there has been an early rupture of the membranes or other reasons for a slow, painful dilatation stage. Likewise it is indicated in borderline pelvic disproportion cases; giving rectal analgesia in this type of case has saved many women from Cesarean sections.

Over a period of five or more years large numbers of articles concerning obstetrical analgesia have been published in medical and obstetrical journals in which the details as to drugs used, indications for their use, and the proper time for their use have been stated very carefully and discussed. Those desiring such information will have no difficulty in obtaining references to all these publications, and it behooves those physicians doing obstetrics to become familiar with this technique and to add it to their equipment in an attempt to better care for their patients.

SODIUM AMYTAL AS AN ADJUNCT TO INHALATION ANESTHESIA (Physiologic Effect)

The use of sodium amytal (iso-amyl ethyl barbituric acid) as an adjunct to inhalation anesthesia is becoming more general among surgeons. Its usefulness is accepted generally by those who have had experience with it, and any contribution as to its physiologic effect on the body is of interest. The September number of *Surgery, Gynecology and Obstetrics* contains an article from the Department of Pharmacology, McGill University, which reports the effects of sodium amytal on liver function, rate of secretion and composition of urine, alkali reserve and concentration of the blood, and body temperature. The disturbance of liver function always has been regarded as a very accurate gauge of the toxicity of a general anes-

thetic. It is on this account that chloroform has been regarded as a dangerous anesthetic. In previous experiments, the authors have shown that chloroform when administered for two hours impairs liver function for six weeks, while with ether anesthesia liver function is normal in forty-eight hours. The experiments showed that there was no impairment of liver function following sodium amytal, either immediately or delayed. This would seem to indicate that sodium amytal is a harmless drug so far as its effect on the liver is concerned.

The kidney does not suffer damage from sodium amytal. A slight oliguria was noted, with a reduction in urea and chlorides, although a percentage increase, that is a higher concentration, which implies active kidney function. This is important because anesthesia is often necessary in the presence of damaged kidneys.

The hydrogen-ion concentration of the blood is increased following administration of sodium amytal. The slowed respiratory rate and disturbed phosphoric-lactic acid metabolism probably accounting for this. The anoxæmia associated with depressed respiration may account for the acidosis, although the authors were careful to avoid this by administration of oxygen on slightest indication of cyanosis.

Blood concentration seems to be decreased, the maximum hydremia occurring about one hour after administration of the drug. This is in contrast to ether, which produces a marked blood concentration. The oliguria noted above is difficult to explain with a diluted blood, yet such seems to be the case.

It is reassuring to learn that what promises to be so valuable a drug as sodium amytal is devoid of harmful effects on normal physiology. Its usefulness perhaps may be found to lie in the realm of physic phenomena, but none the less valuable for that reason. A physic anesthesia is but little less valuable to a patient than a physiologic one. Following the pre-anesthetic administration of sodium amytal a patient goes peacefully to sleep in his bed, and remembers nothing connected with the operative procedure. The sights, sounds and odors are not registered in the patient's consciousness, nor is he or she conscious of the disagreeable experience of an inhalation anesthesia. In view of the harmlessness of the drug, this would appear to be a pure gain to the patient undergoing an operation.

THE PHYSICIAN IN POLITICS

The Illinois State Medical Association maintains a lobby at Springfield for the distinct purpose of protecting the interests of the medical profession and public against injurious medical legislation. Every county medical society in Illinois also maintains a legislative committee and it really functions. In consequence of this active part taken in the politics of the state, Illinois has not been burdened with a lot of medical legislation detrimental to the interests of medical men

and public alike. In fact, the medical profession of Illinois, through its lobby and county legislative committees, has been powerful enough and wielded sufficient influence so that nowadays if a politician has in mind the introduction of any bills into the legislature that have the slightest bearing upon medical practice or in any way affect the public health, he first submits his bill to the legislative committee of the Illinois State Medical Association before he makes any move to present it before the legislature for consideration.

What has been done and is being done in Illinois can be done in Indiana. We have no criticism to offer concerning the splendid work done by legislative committees of our State Medical Association in past years, but we do think that another step should be taken by adopting and putting into effect some such plan as prevails in Illinois. We owe it to ourselves to forget political parties, and to vote and work for those policies that tend to promote the best interests of the medical profession and incidentally of the public in all matters pertaining to the practice of medicine and the preservation of individual and public health. Right now is a good time to begin our political activities, and inasmuch as there will be an election next month the legislative committee of our state medical association should become *immediately* by securing information concerning the qualifications of every candidate for election to the coming legislature, and in this work the legislative committees of the various county medical societies must join. There should be no half-hearted response to requests for activity, for work *before* election is very much more effective than work after election or when the legislature convenes. While the responsibility lies with the accredited representatives of the Association, yet every member of the Association should go out of his way to further the aims and objects we have in mind. Likewise the wives of the reputable physicians of Indiana should put their shoulders to the wheel and let it be known that through their influence and their votes they are going to stand shoulder to shoulder with their husbands in fighting politically for the best interests of the medical profession. Whenever a candidate for office is known to be antagonistic to the regular medical profession, then it is up to us as a profession to oppose that man at the polls and if possible defeat him for election. If he is elected to the legislature then our next move is to make ineffective any of his efforts against us. Playing party politics should be beneath our dignity, but taking a non-partisan interest in politics in our own behalf not only is highly commendable but at this particular time is absolutely necessary for self-preservation of our profession and the ideals that we follow which in the final analysis are to the best interests of our patrons. The medical profession as a profession is going to be wiped from the face of the earth within the next few years unless medical men individually and col-

lectively put forth some effort to stop the progress of those influences that are discriminatory and unjust. Don't wait for a charge of dynamite to blow you up before realizing the danger.

THE INCONSISTENCY OF BETTER BUSINESS BUREAUS

The Better Business Bureau in one of our Indiana cities is said to be responsible for a jail sentence upon an itinerant peddler whose only offense was selling goods without a license and competing with the established merchants of the city. The same Better Business Bureau never peeped when its attention was called to the fraudulent and deceptive quack medicine advertising of a concern that was taking thousands of dollars from the people of the city through the medium of full-page advertising in the daily press. On the one hand the poor and inoffensive itinerant peddler had no cash back of him to fight his battles as a direct result of buying his place in the sun through advertising, and that explains the nasty condition of affairs when any effort put forth to suppress quackery proves ineffectual. In short, it is a plain case of influence being bought by advertising, and the unfortunate part of the situation is that the merchant, who also advertises, hasn't the moral backbone to bring a little pressure to bear as an advertiser in suppressing the fraudulent and deceptive advertising that takes money out of his pockets. There isn't a single newspaper in the state of Indiana that would not hesitate to take quack medical advertising if one of its leading merchant advertisers called over the telephone to say that he would refuse his advertising patronage to any newspaper that carried quack medical advertising. The press may be all powerful, but it isn't going to turn a deaf ear to complaints from its heavy, honest advertisers. There is no excuse for giving newspaper space to the extent of a full page to a lying human skunk who promises to diagnose disease by application of a magnetic needle, and to cure cancer, consumption, diabetes and other serious diseases without the use of drugs, and yet some of our Indiana newspapers are willing to take money for feathering the nest of that sort of an impostor. It is the full-page advertising that does the work, and as a mere side issue, when the newspapers talk about reputable physicians advertising, what chance would they have in competition with that sort of faker and exploiter even though they elected to lower their self respect by being placed on a level with quackery.

SURGEONS' BIDS WANTED

While there can be no reasonable objection to the custom of calling for bids on any contract involving a large amount, the habit many business and professional men have of chasing bids

on small quantities of printed matter is sometimes exasperating to printers.

In many cases bids are asked on jobs amounting to only a few dollars, where securing the proposals must inevitably cost more in time and trouble than any possible saving would repay.

According to a story now being widely published, one printer got weary of bidding on trivial jobs, and when a surgeon asked for bids on a small quantity of letterheads, and also requested that the type form be left standing so that he might have the benefit of cheaper rates for future orders, the printer wrote the surgeon this letter:

"Am in the market for bids on one operation for appendicitis. One, two or five-inch incision—with or without ether—also with or without nurse. If appendix is found to be sound, want quotations to include putting back same and canceling order. If removed, successful bidder is expected to hold incision open for about sixty days as I expect to be in the market for an operation for gallstones at that time and want to save the extra cost of cutting." — Williamsport (Indiana) *Pioneer*, March 6, 1930.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital. We invite and urge you to use this Service.

It is absolutely free to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve you.

CASES of poliomyelitis exist in various parts of the country, particularly in the west, and physicians in Indiana should be alert for the appearance of the disease in this community.

WE desire to call the attention of the readers of THE JOURNAL to the coming session of the Southern Medical Association, which will be held in Louisville, Kentucky, November 11th to 14th, inclusive. The names of a large number of nationally known medical men appear on the program. Indiana physicians will be cordially welcome to the convention.

THE Fort Wayne Session seems to have been a decided success from every standpoint. We have heard nothing but favorable comments from various parts of the state. No small amount of credit is due to the members of the committee on arrangements. They worked incessantly and efficiently. The results speak for themselves and show what can be accomplished when the proper effort is put forth.

SINCE so-called prohibition is more and more proving itself a dead letter, and, as Will Rogers says, "The people are getting down to steady drinking," we hear less and less about bootleg doctors. There was a time when a doctor's prescription for alcoholic beverages was very much sought, but today no one thinks of paying a doctor for a prescription for something that can be obtained so readily.

MANY osteopaths, chiropractors, naturopaths and other so-called drugless healers are really prescribing drugs, and in particular narcotics. Furthermore, it doesn't seem at all difficult to find druggists who will fill prescriptions from the drugless healers. For some reason or other little or nothing is done to prevent this infraction of the law governing the matter. The public suffers and the public pays the bill, so why worry?

AGAIN we desire to emphasize the importance of arranging for postgraduate courses in the populous centers of Indiana. Why do not the medical societies in such cities as Indianapolis, Fort Wayne, Evansville, Terre Haute, Gary, Muncie and perhaps even every county seat, plan for a practical postgraduate course for the physicians in the immediate vicinity? No doubt many physicians would be not only willing but pleased to sign up for a practical course and pay a fee for the instruction in order to meet the expense of such an undertaking. A systematized course could be carried to every section of the state.

EVERY member of the Indiana State Medical Association should be interested in diphtheria prevention, which means, of course, immunizing not only school children but the pre-school child. The work should be carried on in the public and parochial schools, the activities centering in children up to nine years of age. When the school has been taken care of then it is necessary to give attention to the pre-school children. The importance of this matter should be emphasized in an educational campaign which should include articles in newspapers, talks to parent-teacher and other associations, and advice on the part of family physicians. The parents should be made to realize the value and use of preventive measures for the prevention of diphtheria, and every physician should be prepared to give the diphtheria toxoid or toxin-antitoxin inoculation.

ASPIRIN seems to be the almost universal remedy for headache of whatever cause. Aspirin self-prescribing is due to the inexcusable practice of many physicians of giving patients information as to what to prescribe for themselves. That this practice is fraught with danger is unquestioned, for aspirin is not a safe drug for self-prescribing, and, besides, it is a recognized fact that the aspirin habit may be incurred. A busy general physician tells us that within recent years he has had

at least ten or twelve patients who were confirmed aspirin users and thought that they could not get along without the drug on the supposition that it keeps away rheumatism, neuralgia, and some other disagreeable symptoms and manifestations. Worst of all, self-prescribing is aided through lay press advertising and the ease with which almost any kind of drug may be procured from druggists or department stores. Physicians are shouldering a dangerous responsibility when they encourage self-prescribing.

THE Indiana State Medical Association, through the House of Delegates, has placed itself on record as opposed to all-time health officers. In discussing the matter one of the delegates very appropriately called attention to the fact that a part-time *good* man is worth infinitely more than an all-time *poor* man, and the chances are against the possibility of securing good men as all-time health officers for the salary that the different municipalities or counties can pay. He also referred to past history as indicating what might occur through political domination of a bunch of all-time health officers who, following a perfectly natural tendency, would aim to not only perpetuate their service but constantly aim to improve conditions for themselves. We are inclined to agree with the opinions expressed, and to reiterate what we have said in former numbers of THE JOURNAL that Indiana is not backward in public health work with our present system, and that all that is necessary to make it better is to establish more cooperation and coordination between the medical profession as a whole and the public health administration.

IN previous numbers of THE JOURNAL we have referred to one Howard W. Ambruster, who has been making unfounded claims concerning food and drug adulteration, and is carrying his fight to the courts in an endeavor to attain his end, which, it seems to us, is entirely personal and mercenary. *The Journal of the A. M. A.* in its issue of September 6, 1930, for the first time calls attention editorially to the fallacies of Ambruster's claims and the reasons why Ambruster secured the slightest consideration from representative persons at all interested in the question. The real basis of the Ambruster claims, with little room for doubt, is founded upon the unfortunate position of Ambruster, who is an ergot importer and has failed in his efforts to corner the market and now wants somebody to pull his chestnuts out of the fire. He has resorted to vilification and misrepresentation in his fight, and his attacks have been aimed at not only the American Medical Association through its Council on Pharmacy and Chemistry, but at the United States Department of Agriculture, under whose administration the admittance of ergot to the United States is placed.

UNITED STATES SENATOR COPELAND, a physician and formerly commissioner of health for the State of New York, deserves an immense amount of credit for his fidelity in attending the long-drawn-out senatorial investigation of the Ambruster charges concerning impure ergot, and his wise counsel and assistance to the committee in conducting the investigation. W. G. Campbell, chief of the Food and Drug Administration and director of Regulatory Work of the Department, also deserves commendation for the careful manner in which he prepared for the investigation, and the proof exhibited that the utmost wisdom has been observed by the department in passing upon the quality of ergot admitted to this country, and the work of the various well-known pharmaceutical houses in preparing ergot preparations for the market. Needless to say the investigation resulted in exonerating the government, the manufacturers, and all those concerned in procuring and marketing ergot. Ambruster's charges, proved to be selfish and mercenary and without just foundation, are thus disposed of, and we hope we have heard the last of him and his vilification of everybody who interfered with his plans.

THE radio is very useful to the quacks and commercial healers of every description who are able, as a result of paying for the privilege, to give widespread circulation to their specious claims to effect cures. The credulous swallow the bait, pay the money, the quack prospers and later on the deluded victim finds that he has been imposed upon and defrauded but has no redress, and another sucker arises to take his place. Some pressure should be brought upon the radio commission to force broadcasting stations to bar these notorious quacks and medical impostors from the air. Sometimes the broadcasting stations are in doubt as to "who is who" in connection with health advice, for there are many unscrupulous persons who falsely represent themselves over the radio as physicians and who give so-called health advice which includes recommending self-dosing with quack medicine, so-called health foods, and patented preparations fraudulently advertised as scientific products. The one way that broadcasting stations can be sure of their ground is to permit the use of the station only to reputable medical men as passed upon by some reliable authority like the American Medical Association.

"THE Psychology of Happiness" is the title of an address presented at the convention of chiropractors held in Fort Wayne early this month. Another address was entitled "Relation of the Nervous System to Disease," and still another from the fountain head of chiropractic at Davenport, Iowa, was entitled "Our Future Is Not Behind Us." Knowing something about the entire absence of scientific education and training in chiropractic schools we are amused at the temerity of the members of the weakest of the pseudo med-

ical cults in selecting subjects which, if intelligently handled, require erudition far beyond the possession of any chiropractor whose education has been limited very largely to pulling and kneading. The address concerning the future of chiropractic truthfully could have been "The Future of Chiropractic Is Behind Us," and the guiding geniuses at Davenport, Iowa, have admitted as much. Chiropractic is dying and soon will be but a memory, but we may expect some other new cult to take its place, for be it known that the American public likes to be humbugged, and for a time at least will give its approval and confidence to any sort of tomfoolery that masks under the form of healing the sick and suffering.

IN the June number of *THE JOURNAL* we quoted, from what we thought was a trustworthy source, an item in which the Iowa State Insurance Department was credited with having pronounced the Physicians' Protective Casualty Company of Chicago as offering a fake insurance proposition. Since then we have received a letter from the Iowa State Insurance Department saying that no statement from the Department concerning the trustworthiness of the Company in question has been issued. The Department admits having received an inquiry concerning a man representing himself as a state agent for the Physicians' Protective Casualty Company of Chicago, and answered the inquiry to the effect that the Company is not licensed to do business in Iowa, and by inference at least conveying the thought that the supposed agent was a faker. In all probability that is the occasion for the misstatement that we quoted and we offer our apologies for a technical error. The Physicians' Protective Casualty Company of Chicago is not licensed to do business in Indiana, though a company with a similar name, organized by the same people, is licensed to do business in this state and has deposited with the insurance department of the state of Indiana two thousand dollars in securities for the purpose of guaranteeing the payment of any claims.

WE recently learned that a physician talking before a parent-teachers' association made the unqualified statement that tonsils and adenoid tissue never should be removed in a child until he or she reaches the age of six years. What a pity that a physician of such monumental ignorance is permitted to talk before a parent-teachers' association. It probably will take the combined efforts of many reputable physicians to offset the damage done by such ignorant advice, for many a child of two years or even less in age is in ill health and suffering from obstructed breathing from the effects of a pair of tonsils that touch in the median line of the throat and a bunch of adenoid tissue that completely fills the postnasal space, and whose comfort and even health is improved greatly as a result of a well-performed tonsil and adenoid operation. A physician who advises against oper-

ation in such cases reminds us of the ignorant woman who when advised to have her child operated for enormous tonsils that obstructed breathing replied that the Lord put the tonsils there for a purpose and under no circumstances should they be disturbed. Perhaps she now knows that those tonsils were a contributing cause to the child's subsequent death, but to analyze her argument it is passing strange that the Lord should be so partial in dealing out tonsils and so careless in providing for the health and comfort of children.

RECENTLY there has been renewed activity of the anti-vivisectionists, who seem to think that animal experimentation is altogether too common, and they, in their fanatical and inconsistent way, desire to suppress it. Every once in a while we get an outburst from the anti-vivisectionists without any particular reason for it, and in all probability it is stirred up with a view to keeping the subject alive and if possible secure new legislation or renewed activity in enforcing existing legislation concerning animal experimentation. The majority of them are fanatical in the extreme, and they do not hesitate to lie like turnip thieves as to the manner in which animal experimentation is carried on. They will not recognize the fact that every educational institution and scientific laboratory that engages in animal experimentation conducts the work under the most approved methods whereby the animals experience no torture or pain of any kind whatsoever. As a mere side issue it is passing strange that these anti-vivisectionists have absolutely nothing to say concerning the torture of animals by trappers, sportsmen and slaughter houses. Even the thrifty housewife who economizes by buying live chickens and then kills them by wringing their necks is guilty of torture that never receives notice at the hands of the fanatical anti-vivisectionists. We are of the opinion that some of the misleading as well as frank statements made in the public press by anti-vivisection agitators should be answered, so that the public will have the truth concerning animal experimentation, how it is performed, and the beneficial effects resulting from it. The public should know, as the *Journal of the A. M. A.* well says, that "the law lays down no restriction on poisoning, or drowning and yet an hypodermic injection is a matter for a deluge of anti-vivisection tears. Thus organized ignorance tramps over humanity and common sense."

IN the September number of *The Delineator* Celia Caroline Cole presumes to give some sage medical advice, and as treatment "for the puffy look around the eyes and lines and wrinkled lids", among other things she says, "Eye exercises—spectacles if you have to have them, but better take the eye exercises and have a good osteopath adjust the nerves in the back of the neck and backbone and then dispense with spectacles."

Further on she says, "Use a nourishing cream on the lines and a mild astringent on the puffiness. Learn to rest your eyes by palming, or when you are out in public and can't palm, merely by thinking of lovely things you have seen—feel the eyes relax with pleasure—or by thinking of deep, deep, smoky, floating, velvety black."

Think of feeding such tommyrot to sensible readers and imagine, if you can, how idiotic this advice appears to many intelligent readers whether they know much about scientific medicine or not. Just how the proprietors and owners of *The Delineator* can square themselves after accepting for publication such nonsensical stuff remains to be seen, and it is more difficult to understand why *The Delineator* permits its pages to be so prostituted. As a suggestion to the members of the Woman's Auxiliary of the American Medical Association we recommend that each and every one of them write a letter of protest to *The Delineator*, and accompany it with the request that *The Delineator* make suitable amends or cancel the subscription of the writer. You can bet a dollar against a punched nickel that if even a few hundred members of the Woman's Auxiliary, with their influence in women's clubs, attack *The Delineator* for printing such untrustworthy information as herein quoted, there will be a right-about-face policy adopted by the publishers and owners of *The Delineator*. Intelligent people do not want their favorite periodicals to be dealing out false, unscientific and untrustworthy articles concerning the practices of medical pretenders, and if the owners and publishers of *The Delineator* are wise they will not have a repetition of articles such as the one to which we refer.

WE sincerely hope that the next session of the Indiana State Medical Association will follow the plan which prior to this year has been in effect. Why not try having the golf tournament, which of late years is such an important feature, on Wednesday, starting promptly at 9:00 o'clock in the morning and ending with a luncheon at 1:00 p. m. with distribution of prizes at the completion of the luncheon? The meetings of the Council, the House of Delegates, and the Woman's Auxiliary can be held in the afternoon, and the evening devoted to social entertainment for members and their wives. Thursday could be devoted to clinics or meetings of the Sections, and Friday to meetings of the Council and House of Delegates, and general meetings with noted speakers talking upon practical subjects. The last day ought to be the best day of all, and the program committee should arrange for such a scientific feast that no member of the Association will think of missing it. The complaint so frequently registered is that we have too many papers, some of which are worthless and others too technical and none of which are discussed thoroughly. Why not follow the plan of some state associations of having only *two* or at the most three papers for a meeting, but arrange

to have those papers presented by men who can present the subject intelligently and with sufficient clarity so that every listener will not only understand the subject but be instructed? These could be illustrated by stereopticon or moving pictures, giving forty minutes to an hour to each essayist if advisable and still leave time for a generous discussion on the part of the members, and in reality a good discussion proves to be more than half of the benefit derived from papers. Then there is a crying need for more business-like methods of presiding officers in enforcing rules concerning the length of time to be given essayists or discussants. It is unfair to everyone concerned to permit an essayist to ramble on for forty minutes or an hour when he is supposed to have only twenty minutes, or to permit a discussant to waste ten to thirty minutes of the audience's time when he is only entitled to five minutes. Our Association has had some unfortunate experiences in connection with all of these matters under discussion, and it is hoped that the Committee on Arrangements will start early in preparing for the 1931 session so that some of the pitfalls may be avoided.

THERE are not a few general physicians who have been guilty of the inexcusably false advice to the effect that sinus infection is incurable. In consequence of this advice there are many patients suffering from suppuration of one or more of the accessory sinuses who are paying the penalty of discomfort and ill health if not a fatal termination of the trouble which appropriate attention would correct. It is a rather strange and contradictory attitude to assume by a physician who insists that the average abscess cavity must be drained and ventilated by means of surgical procedures, and yet maintains that an infection in the accessory sinuses should not receive such attention. To our notion it is dangerous advice to pursue a waiting policy in the presence of an infectious process in any of the accessory sinuses, for, like the appendiceal abscess, a rupture, particularly if it ends in intracranial complications, may result in an unnecessary death. On the other hand, ventilation and drainage of the accessory sinuses in the presence of a purulent inflammation not only is positively indicated but if done in a proper manner results in a cure in the majority of instances. The fact that the retention of infective material can be prevented through drainage is in itself beneficial, in that in a measure drainage prevents systemic absorption and gives suitable access to the cavity for lavage and medication is in itself a need in bringing about favorable results. The reason why general physicians have not more generally recommended adequate ventilation and drainage of infected accessory sinuses is based on the fact that an abscess in an accessory sinus very frequently partially evacuates itself through the natural opening after a period of more or less suffering from pressure, and the patient thus obtains

relief. However, they fail to take into consideration that the residue remaining in the sinus not only offers abundance of septic material for absorption, with all of the ills that may come from it, but affords an increasing tendency for repetition of the acute trouble. A still further reason for objection to ventilation and drainage is due to the fact that much very inadequate and perhaps unskillful sinus surgery is performed, and in consequence the patient who is suffering with a sinus infection does not obtain the relief that he deserves to secure and would secure if proper attention were given him. The well-trained and experienced rhinologist who adequately ventilates and drains infected accessory sinuses according to approved surgical methods is accomplishing just as many cures for his patient as does the competent and trustworthy surgeon who operates appendiceal abscesses, and his judgment and skill is just as necessary and to be trusted as that of the abdominal surgeon.

THE quality of the air that we breathe in our homes and offices and public buildings as it relates to health and comfort has received too little attention on the part of the medical profession. Sanitary engineers, and particularly that branch known as heating and ventilating engineers, have given the subject a great deal of serious thought and spent a great deal of time and money in scientific investigation. That the results have borne fruit is attested by the results in those office buildings, factories and theaters that have adopted means of giving the inmates an abundance of pure, moistened warm air in the winter and cold air in the summer, with increasing comfort and improved health in consequence. Most of the more recently built and large moving picture theaters have installed plants that are maintaining not only a constant circulation of air throughout the theater, but provide that the air coming into the theater is filtered or washed by passing through a thin stream of water and delivered constantly at the required humidity and temperature, and not only is it for the comfort of patrons but in the best interests of health. The example has been followed by some large office buildings and factories. More recently a few of the highest-priced apartment houses, in New York for instance, likewise have given attention to the ventilating and purifying process of the air in the apartments with a view to giving tenants comfort throughout the entire year, warm in winter and cool in summer, and the added advantage of more healthful conditions with a lessening of many of the ills that come from breathing not only dust-laden atmosphere but one that is dry and irritating to the respiratory tract. When we stop to think that most of us spend at least three-fourths of our time in buildings, and that rarely do we find the air sufficiently moistened in winter, cool in the summer, or at any time free from dust and

other impurities, the reason for giving the subject more serious attention is apparent. It may not be possible or even feasible to install expensive equipment for ventilating, moistening and regulating the temperature of the air we breathe in our homes and offices, even though such expenditure is just as logical as the expense of decoration, and in the interests of health as economical, yet we can do something toward creating a better circulation of air, and it is important as well to give greater moisture to the air we breathe in our super-heated offices and homes, and thus do away with many of the recurring colds and bronchial affections caused by the injurious effects of constantly breathing dry air with its unhealthful effect upon the mucous membrane of the upper respiratory tract, which is overworked in efforts to supply the proper amount of moisture for comfort and health. In Indiana, for instance, we have a very trying climate during the winter months, and head colds and other respiratory affections are common and thought to be due not only to some changes of weather but the breathing of infection. It is but fair to assume that the resisting power would be greater if we avoided conditions such as the dry and super-heated air we ordinarily breathe and paid a little more attention to over-eating and over-dressing. As a part of the health advice given out by the medical profession it would be well to include some discussion of the kind of air we breathe in our homes and places of business and amusement. The better class of moving picture theaters have taken the initiative and deserve great credit. The medical profession should indorse the movement.

MEDICO-LEGAL DEPARTMENT

BY ALBERT STUMP

ATTORNEY FOR

INDIANA STATE MEDICAL ASSOCIATION

Question: What is the order in which debts of a decedent are paid out of his estate?

Answer: The statute classifies the debts of a decedent and provides the order in which those various classes of debts are to be paid. That classification is as follows:

1. The expenses of administration.
2. The expenses of the funeral.
3. The expenses of last illness.
4. Taxes.
5. Debts secured by liens upon the personal estate of the decedent created or suffered by him in his life time.
6. A sum not exceeding \$50.00 for wages for labor performed within two months prior to the death.
7. General debts.
8. Legacies.

(See Section 3229, Burns 1926.)

The court orders the money applied to the expenses of administration and distributed among the claimants whose claims have been allowed in

the order above stated, *pro rata*, among the claimants in each class.

(See Section 3290, Burns 1926.)

Prior to the year 1881 the statute provided that debts for funeral expenses and expenses of last illness of the decedent jointly constituted the debts in Class 2. The legislature that year changed the classification to put the debts for funeral expenses prior to the debts for the expenses of the last illness. The statute having fixed the order in which the claims shall be paid the court has no power to change or deviate from that order, and the administrator is likewise bound thereby.

Question: If a physician is unable to obtain the full amount of his bill, due to the fact that the claims of the undertaker have precedence over the claims of a physician, has he any other recourse by which he may obtain his money?

Answer: The claims of a physician are given precedence over the claims of general creditors, as for instance, for those who supply groceries, fuel or any other necessities of life as well as claims growing out of business transactions or otherwise. Under the law in Indiana there are certain family relationships from which obligations may develop on the part of one to provide the necessities of life for another. Among these necessities of life would be medical care and attention. Thus the husband is liable for the support of his wife. If the wife left an estate the estate she left would also be liable. The wife, however, is not liable for the support of her husband, unless by contract, either express or implied, that liability is created. A contract will be implied where the circumstances are such that the one rendering the services or supplying the necessities did so as the result of acts or words from which one might reasonably infer the promise at the time to pay.

The father and mother of infant children are both liable for the support of the children.

Under a statute adopted in 1921, the children who are of full age and financially able to do so are required to maintain and support their parents, if their parents are sick or not able to work and have not sufficient means or ability to maintain or support themselves. If there are children of a deceased patient who are able to support their parents, they could be made liable under that statute for medical care and attention.

Outside of the possibilities just mentioned, I do not believe the physician has any other recourse.

While this classification of claims against a decedent's estate may not seem entirely reasonable, the fact should not be overlooked that the physician already occupies a better position than other creditors might regard as just and reasonable. Cogent reasons would support the view that the physician who treated the patient in his last illness should be given as generous treatment as an undertaker who handled the funeral. But there might also be brought into the problem the relative deserts of those who provide food, clothing and shelter. They fall into the group of general cred-

itors. The grocer who supplied bread and meat would not be without plausible arguments that what he did was as essential to the life of his customer as the services of anyone else and that therefore he should be paid from the estate of the decedent for any such bills remaining unpaid at the time of the death on the same terms as the physician and undertaker. If this reasoning were followed there would be no classification of the debts and all would share *pro rata*.

While the classification may seem arbitrary, in my judgment the law is as favorable to the physician now as it would be likely to be made if any agitation were developed to improve the physician's classification.

Question: Could the physician file a claim with the township trustee for the payment of his bill?

Answer: The township trustee is required "in cases of necessity to promptly provide medical and surgical attendance for all of the poor in his township who are not provided for in public institutions." This provision of the statute gives the trustee power to employ a physician; but this employment can be made only after a claim for relief has been made by the poor person and an investigation of the claim has been completed by the trustee. There is an exception to this limitation upon the liability of the trustee where an emergency exists which makes it impossible to follow the regular procedure without causing severe and harsh results. In a case from Tipton county entitled *Newcomer vs. Jefferson Twp.*, reported in 181 Ind., page 1, the Supreme Court held that where necessity existed for prompt attention by a physician, if he rendered such services the township was liable, even though no contract had been made between the physician and the trustee.

DEATH NOTES

HENRY CARTER, M.D., of Brighthurst, died September 5, aged eighty-one years. Doctor Carter graduated from the Eclectic Medical College, Cincinnati, in 1892.

JOHN HAZLEWOOD, M.D., of New Albany, died August 27th, aged sixty-five years. Doctor Hazlewood graduated from the Kentucky School of Medicine, Louisville, in 1883.

WILLIAM GORDON, M.D., of Converse, died August 24th, aged sixty-four years. Doctor Gordon graduated from the National University of Arts and Sciences, medical department, St. Louis, in 1890.

M. L. OILAR, M.D., of Russiaville, died at Johns Hopkins Hospital, Baltimore, August 22nd, aged seventy-eight years. Doctor Oilar graduated from the Medical College of Ohio in 1875. He had retired from the active practice of medicine.

JOHN N. HESS, M.D., of New Marion, died September 14th, aged seventy-six years. Doctor

Hess was a member of the Ripley County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the medical department of the University of Nashville, Tennessee, in 1881.

ORA K. MCKITTRICK, M.D., of Indianapolis, died August 29th, after an illness of six months. Doctor McKittrick was fifty-six years old. He graduated from the Missouri College of Medicine and Science, St. Louis, in 1899. He was a member of the Indianapolis Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

CHARLES O. WILTFONG, M.D., of Chesterton, died September 9th, aged fifty-four years, as the result of an automobile collision in Ontario, Canada. Doctor Wiltfong graduated from the University of Illinois College of Medicine, Chicago, in 1901. He was a member of the Porter County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

C. L. RAWLINGS, M.D., of New Harmony, died August 27th in a hospital at Evansville. Doctor Rawlings was fifty-one years of age. He graduated from the Washington University School of Medicine, St. Louis, in 1903. He was a member of the Posey County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. Doctor Rawlings was secretary of his county society at the time of his death.

NEWS NOTES AND PERSONALS

THE Huntington County Medical Society held its first fall meeting at the Hotel LaFontaine, Huntington, September 9th.

M. W. MANION, M.D., has announced the opening of offices at 601 Hume-Mansur Building, Indianapolis, for the practice of otolaryngology.

DR. IRA COLE, formerly of New Richmond, has located in Lafayette, after having spent ten months doing postgraduate work in pediatrics and obstetrics in the east.

DR. R. E. KINNEMAN, formerly of Indianapolis, has purchased the office equipment of the late Dr. E. R. Sisson, of Greenfield, and has established his office there.

DR. AND MRS. CHARLES R. SOWDER returned the first of September from Winnipeg, Canada, where Doctor Sowder attended the meeting of the British Medical Society.

DR. ROBERT M. DEARMIN has announced the opening of offices at 915 Hume-Mansur Building,

Indianapolis. His practice is limited to diseases of the ear, nose and throat.

THE Noble County Medical Society held its regular meeting at Wolf Lake, August 13th. Following a fish dinner, a general discussion of "The General Practitioner and the Specialist" was held.

MEMBERS of the Grant County Medical Society held a meeting at the Meshingomesia Country Club, Marion, August 27th. Dr. M. A. Austin, of Anderson, presented a paper on "Sex Problems in Medicine."

MADISON county physicians were guests of St. John's Hospital, Alexandria, for the annual Madison County Medical Society banquet, September 16th. Dr. Edwin N. Kime, of Indianapolis, presented an address.

THE Tippecanoe County Medical Society held its regular meeting at Lincoln Lodge, September 11, 1930. Dr. Max A. Bahr, of Indianapolis, presented a paper on "Mental Mechanisms in Health and Disease."

A NEW official journal for the American Society for the Control of Cancer will make its first appearance January 1st. It will be called the *American Journal of Cancer*, and will replace the *Journal of Cancer Research*.

THE Jay County Medical Society held its regular meeting September 5th, at the Country Club, Portland. Dr. H. O. Mertz, of Indianapolis, presented a paper on "General Urological Conditions—Especially Those in Children."

DR. AND MRS. A. M. MENDENHALL have returned from Niagara Falls, Canada, where Doctor Mendenhall was on the program at the annual meeting of the American Association of Obstetricians, Gynecologists and Abdominal Surgeons.

THE Randolph County Medical Society met September 8th at the Randolph County Hospital, Winchester. Dr. Charles Botkins, of Muncie, presented an interesting paper on "Radium in Superficial Skin Lesions." Dr. Paul Moore, of Muncie, presented a paper on "Deep X-ray Therapy."

DR. ELIZABETH M. YAGLE, formerly associate in bacteriology and immunology in the graduate school of medicine of the University of Pennsylvania, has taken charge of bacteriological and serological work in the Mary Hanson Carey research and clinical laboratories of the Methodist Hospital, Indianapolis.

THE sum of \$500, which has accrued from the Casselberry Fund for encouraging advancement in the art and science of laryngology and rhinology, now is available as a prize award. Theses

or reports of work must be in the hands of the secretary, Dr. George M. Coates, 1721 Pine Street, Philadelphia, before February 1st of any given year.

THE fifty-sixth annual meeting of the American Public Health Association will be held at Fort Worth, Texas, October 27 to 30. It will feature a symposium on meningitis, psittacosis, interrelation of the health officer and general practitioner to preventive medicine, atmospheric pollution, undulant fever, malaria control and occurrence of minute amounts of metal in foods.

THE U. S. Civil Service Commission announces open competitive examination for medical officer, associate medical officer and assistant medical officers. Applications for these positions must be on file with the Commission at Washington, D. C., not later than December 30, 1930. Examinations are to fill vacancies in the Veterans' Bureau, Public Health Service, Coast and Geodetic Survey, Panama Canal Service and Indian Service. Complete information may be obtained from the U. S. Civil Service Commission, Washington, D. C.

THE Crowell Publishing Company has called attention to the fact that numerous physicians in Indiana and Michigan have been victimized by a fraudulent salesman who goes by the names of Southerland, Meyers, Hill, Lane or Hamilton. The man is about thirty-two years old, five feet five inches tall, and weighs about 150 pounds. He is a pleasant talker and uses portions of a receipt blank issued by the *Woman's Home Companion* Reading Club of Detroit, but he tears this blank in half after collecting \$1.80 from the physician, promising to send three different magazines for one year. In most cases Collier's is included. On recognizing this person physicians are requested to inform the police or secretary of the National Publishers' Association, 15 West Thirty-seventh Street, New York City.—*J. A. M. A.*, Sept. 20, 1930.

IN addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Aces Laboratory, Inc.:

Mercurochrome Suppositories Aces.

Cutter Laboratory:

Diphtheria Toxoid-Cutter, 45 cc. vial.

Hoffmann-LaRoche, Inc.:

Synthetic Thyroxine:

Ampuls Synthetic Thyroxine-Roche, 1.1 cc.

Solution Synthetic Thyroxine-Roche.

Tablets Synthetic Thyroxine-Roche, 1 mg.

Winthrop Chemical Co.:

Mesuirol:

Ampules Emulsion Mesuirol, 20 percent, 1 cc.

Theocin:

Tablets Theocin, 1½ grains.

International Vitamin Corporation:

I. V. C. Vitamin Concentrate of Cod Liver Oil.
National Drug Co.:

Antimeningococcic Serum.

Parke, Davis & Co.:

Gas-Gangrene Antitoxin (Combined) Refined and Concentrated.

Soluble Gelatin Capsules Parke, Davis & Company's Standardized Cod Liver Oil, 10 minims.

Soluble Gelatin Capsules Parke, Davis & Company's Standardized Cod Liver Oil, 20 minims.

Soluble Gelatin Capsules Parke, Davis & Company's Standardized Cod Liver Oil, 2.5 Gm.

Soluble Gelatin Capsules Parke, Davis & Company's Standardized Cod Liver Oil, 5 Gm.

G. D. Searle & Co.:

Chiniofon-Searle:

Tablets Chiniofon-Searle, 0.25 Gm. (4 gr.).

C. M. Sorensen Co., Inc.:

Inhalant Chloretone Creosote and Eucalyptol-Sorensen.

Spicer & Co.:

Tartro-Quiniobine:

Tartro-Quiniobine Ampules 2 cc.

White Laboratories, Inc.:

White's Cod Liver Oil Concentrate.

Nonproprietary Articles:

Quinine Bismuth Iodide.

Sodium Potassium Bismuthyl Tartrate.

The following article has been exempted and included with the List of Exempted Medicinal Articles (New and Nonofficial Remedies, 1930, p. 477):

C. M. Sorensen Co., Inc.:

Inhalant Pine Camphor and Eucalyptol-Sorensen.

INDIANA UNIVERSITY NEWS NOTES

LIEUT. COL. GEORGE P. PEED, of the U. S. Army, spoke before students of the Indiana University School of Medicine at Indianapolis Friday, September 26th. He spoke on opportunities in the military service for hospital internes.

ONE hundred and forty-seven members of the 1930-31 freshman class at Indiana University are recipients of county scholarships, which provide for the cancellation of contingent fees for one year at the university. This amounts to \$65.00 each.

DR. L. S. DAVIS, professor of nutritional research and chemistry at the Indiana University School of Dentistry at Indianapolis, has resigned to accept a position at Georgetown University, Washington, D. C. Doctor Davis had been connected with Indiana University since 1894.

DR. BURTON D. MYERS, dean of the Indiana University School of Medicine at Bloomington, attended the convention of the Indiana State Med-

ical Association in Fort Wayne the week of September 22nd. Dean Myers made a report of the Committee on Medical Education and Hospitals, of which he is chairman.

EDWIN D. PERRIN has been appointed instructor in the department of anatomy at Indiana University in addition to the following laboratory assistants: Rex W. Dixon, technical assistant in anatomy; Ralph E. Blackford, anatomy assistant; Grace Caufman, assistant in histology and neurology; Malcolm Gibson, anatomy assistant; and Gustavus Peters, anatomy assistant.

FIFTY-FIVE Indiana University students, including thirty-seven men and eighteen women, made all A's in their university work the second semester of last year. Included in the list of honor students at the university were two students in the school of medicine. They were Howard W. Bryn, graduate of New Salesbury High School, now residing in Terre Haute, and William J. Clauser, graduate of the Delphi High School.

A RECEPTION for new students of the Indiana University School of Medicine at Indianapolis was held Friday evening, September 19th. The principal speaker was Dr. Burton D. Myers, dean of the Indiana University School of Medicine at Bloomington. Members of the faculty and staff of the medical school and hospitals and their wives attended the reception. A buffet luncheon and a dance were held following the speaking program.

THE Association of Monon Railway Surgeons, meeting in Indianapolis October 1st, will attend a clinic at the Robert W. Long Hospital, according to Dr. E. T. Thompson, administrator of the Indiana University School of Medicine and Hospitals. Dr. L. A. Ensminger, chief surgeon of the New York Central Lines, Indianapolis, arranged the clinic. Dr. W. D. Gatch, professor of surgery in the medical school of Indiana University, Dr. Harold Trusler and Dr. Robert A. Milliken, of the faculty, are on the program. The association numbers thirty-two members, most of whom are located in Indiana cities. The meeting is a one-day meeting.

SOCIETY PROCEEDINGS

INDIANA STATE MEDICAL ASSOCIATION

FORT WAYNE SESSION, 1930

HOUSE OF DELEGATES

FIRST MEETING

SEPTEMBER 24TH, 5:30 P. M.

Call to order by the president, Dr. A. C. McDonald, of Warsaw.

Roll-call by Dr. George Miller, chairman of the Credentials Committee, showed the following delegates (or alternates) present:

| COUNTY | DELEGATE |
|--------|-------------------------------|
| Adams | Ernest Franz, Berne |
| Allen | S. P. Hoffman, Fort Wayne (A) |
| | D. D. Johnston, Fort Wayne |
| | J. M. Pulliam, Fort Wayne |

| | |
|--------------------|----------------------------------|
| Bartholomew | M. C. McKain, Columbus (A) |
| Boone | W. H. Williams, Lebanon |
| Cass | G. D. Miller, Logansport |
| Clay | Fred C. Dilley, Brazil |
| Decatur | I. M. Sanders, Greensburg (A) |
| DeKalb | W. K. Templeton, Garrett (A) |
| Delaware-Blackford | Elmer T. Cure, Muncie |
| Dubois | L. C. Lukemeyer, Huntingburg |
| Elkhart | A. C. Yoder, Goshen |
| Fayette-Franklin | F. J. Spilman, Connersville |
| Floyd | P. H. Schoen, New Albany |
| Fountain-Warren | A. L. Spinning, Covington |
| Fulton | A. E. Stinson, Rochester |
| Grant | John F. Loomis, Marion |
| Hancock | Jesse E. Ferrell, Fortville |
| Hendricks | W. H. Terrell, Pittsboro (A) |
| Henry | Walter M. Stout, Newcastle |
| Howard | Walter W. Gipe, Greentown |
| Huntington | W. H. Vance, Markle |
| Jay | W. D. Schwartz, Portland |
| Jefferson | Oscar A. Turner, Madison |
| Kosciusko | C. Norman Howard, Warsaw |
| LaGrange | A. J. Hostetler, LaGrange |
| | J. E. Rarick, Wolcottville (A) |
| Lake | J. A. Craig, Gary |
| | T. W. Oberlin, Hammond |
| | C. R. Pettibone, Crown Point |
| | F. A. Malmstone, Griffith (A) |
| LaPorte | John Kelly, LaPorte |
| Lawrence | Harry L. Ragsdale, Bedford |
| Marion | H. H. Wheeler, Indianapolis |
| | H. O. Mertz, " |
| | Wm. H. Kennedy (A) " |
| | W. F. Kelly, " |
| | A. F. Weyerbacher, " |
| | H. G. Hamer, " |
| | Herman Morgan, " |
| | Frank C. Walker, " |
| Miami | H. E. Lyon, Peru |
| Monroe | Wm. C. Reed, Bloomington |
| Montgomery | T. Z. Ball, Crawfordsville |
| Morgan | E. M. Pitkin, Martinsville |
| Noble | W. F. Carver, Albion |
| Orange | George Dillinger, French Lick |
| Ripley | George Revis, Versailles (A) |
| St. Joseph | Charles Stoltz, South Bend |
| | A. S. Giordano, " |
| | R. L. Sensenich, " |
| Shelby | W. C. McFadden, Shelbyville |
| Sullivan | J. T. Oliphant, Farmersburg |
| Tippecanoe | J. C. Burkle, Lafayette |
| | G. K. Throckmorton, " |
| Tipton | H. B. Shoup, Sharpsville (A) |
| Vanderburgh | Keith T. Meyer, Evansville |
| | Herman M. Baker, " |
| Vigo | C. S. Carmichael, Seelyville |
| | M. R. Combs, Terre Haute |
| Wabash | O. G. Brubaker, North Manchester |
| Wells | D. C. Wybourn, Ossian |
| Whitley | P. A. Garber, South Whitley |

COUNCILORS:

| | |
|---------------|-------------------------------|
| 1st District | John H. Hare, Evansville |
| 3rd District | Walter Leach, New Albany |
| 4th District | H. P. Graessle, Seymour |
| 5th District | O. O. Alexander, Terre Haute |
| 6th District | B. G. Keeney, Shelbyville |
| 7th District | E. E. Padgett, Indianapolis |
| 8th District | M. A. Austin, Anderson |
| 9th District | F. T. Romberger, Lafayette |
| 10th District | E. M. Shanklin, Hammond |
| 11th District | I. E. Perry, North Manchester |
| 12th District | H. O. Bruggeman, Fort Wayne |
| 13th District | J. B. Rogers, Michigan City |

EX-PRESIDENTS:

| | |
|-----------------|--------------|
| M. F. Porter | Fort Wayne |
| W. N. Wishard | Indianapolis |
| G. W. McCaskey | Fort Wayne |
| J. B. Berteling | South Bend |
| David Ross | Indianapolis |

W. R. Davidson.....Evansville
 E. M. Shanklin.....Hammond
 Charles N. Combs.....Terre Haute
 Frank W. Cregor.....Indianapolis
 George R. Daniels.....Marion
 Charles E. Gillespie.....Seymour

OFFICERS:

A. C. McDonald, President.....Warsaw
 A. B. Graham, President-elect.....Indianapolis
 Wm. A. Doeppers, Treasurer.....Indianapolis
 Albert E. Bulson, Editor JOURNAL.....Fort Wayne
 Thomas A. Hendricks, Executive Sec'y.....Indianapolis

THE PRESIDENT: This being a quorum, the House of Delegates is now declared open and ready for the transaction of business.

I wish to call attention to two things: first, that we wish to get through as speedily as possible—we do not wish to waste any time; and second, that in case of amendment to the Constitution, a two-thirds vote of the delegates registered is necessary; in case of amendment to the By-Laws, a majority vote of all present is necessary.

Upon motion, duly seconded, the minutes of the previous meeting as printed in THE JOURNAL were adopted, and the reading of these minutes at this time dispensed with.

In accordance with Chapter IX, Section 1, of the By-Laws of the Association, the following Reference Committees were appointed by the President:

REFERENCE COMMITTEES

COMMITTEE ON SECTIONS AND SECTION WORK

L. W. Elston, Fort Wayne, Allen County, Chairman.
 Jesse E. Ferrell, Fortville, Hancock County.
 J. M. Shields, Seymour, Jackson County.
 C. S. White, Rosedale, Parke-Vermilion County.
 F. A. Malmstone, Griffith, Lake County.

COMMITTEE ON RULES AND ORDER OF BUSINESS

J. M. Pulliam, Fort Wayne, Allen County, Chairman.
 I. M. Sanders, Greensburg, Decatur County.
 W. K. Templeton, Garrett, DeKalb County.
 Frank Rodenbeck, Arcadia, Hamilton County.
 W. H. Terrell, Pittsboro, Hendricks County.

COMMITTEE ON MEDICAL EDUCATION AND HOSPITALS

W. C. McFadden, Shelbyville, Shelby County, Chairman.
 Charles Stoltz, South Bend, St. Joseph County.
 O. G. Brubaker, North Manchester, Wabash County.
 H. O. Mertz, Indianapolis, Marion County.
 E. C. Cook, Madison, Jefferson County.

COMMITTEE ON PUBLIC POLICY AND LEGISLATION

Miles F. Porter, Sr., Fort Wayne, Allen County, Chairman.

W. B. Siders, Warsaw, Kosciusko County.
 J. C. Burkle, Lafayette, Tippecanoe County.
 F. A. Zeller, Union City, Randolph County.
 Fred C. Dilley, Brazil, Clay County.

COMMITTEE ON PUBLICITY

C. N. Combs, Terre Haute, Vigo County, Chairman.
 H. H. Wheeler, Indianapolis, Marion County.
 John F. Loomis, Marion, Grant County.
 E. M. Pitkin, Martinsville, Morgan County.
 U. G. Poland, Muncie, Delaware-Blackford County.

COMMITTEE ON HYGIENE AND PUBLIC HEALTH

Paul Higbee, Sullivan, Sullivan County, Chairman.
 C. S. Carmichael, Seelyville, Vigo County.
 H. C. Metcalf, Connersville, Fayette County.
 W. F. Shumaker, Butler, DeKalb County.
 C. C. Crampton, Delphi, Carroll County.

COMMITTEE ON AMENDMENTS TO CONSTITUTION AND BY-LAWS

W. F. Kelly, Indianapolis, Marion County, Chairman.
 S. J. Stottlemeyer, Anderson, Madison County.
 C. E. Boyd, West Baden, Orange County.
 W. B. Huron, Tipton, Tipton County.
 M. F. Johnston, Richmond, Wayne-Union County.

COMMITTEE ON REPORTS OF OFFICERS

H. S. Leonard, Indianapolis, Marion County, Chairman.
 J. A. Craig, Gary, Lake County.

D. J. Marshall, Columbus, Bartholomew County.
 D. D. Johnston, Fort Wayne, Allen County.
 R. G. Moore, Vincennes, Knox County

COMMITTEE ON CREDENTIALS

George D. Miller, Logansport, Cass County, Chairman.
 Ira E. Perry, North Manchester, Wabash County.
 J. A. Work, Elkhart, Elkhart County.
 Walter W. Gipe, Greentown, Howard County.
 W. E. Vance, Markle, Huntington County.

COMMITTEE ON MISCELLANEOUS BUSINESS

A. C. Yoder, Goshen, Elkhart County, Chairman.
 A. E. Stinson, Rochester, Fulton County.
 A. L. Spinning, Covington, Fountain-Warren County.
 G. K. Throckmorton, Lafayette, Tippecanoe County.
 W. F. Waller, Angola, Steuben County.

THE PRESIDENT: At this time Doctor Porter will have the floor for a few moments to present the ex-president's diploma to Doctor Gillespie.

MILES F. PORTER, SR., M.D.: Two years ago, because of an accumulation of past-presidents, the Indiana State Medical Association devised a scheme whereby they would sort of put us with the rest of the immortals. That is to say, they would inter us, by kindly and rather nicely suggesting to us that we are on the shelf. I was one of those who received one of these diplomas last year. I hope Doctor Gillespie will take this diploma as I did mine—rather as a mark of respect, nevertheless recognizing that it is a slight hint that it is just as well for us to keep out of matters a little bit and let some of the younger fellows run things. As a matter of fact, Doctor Gillespie, if you take my advice you will keep on the job as long as you feel like it.

I congratulate Doctor Gillespie on being in the company of the immortals.

THE PRESIDENT: We have one gentleman with us tonight, sitting at this end of the table, that we are very glad to see—Dr. G. W. McCaskey.

I think most of you are familiar with the rules and regulations of the House of Delegates. Each motion or resolution must go to some one of the various committees appointed. Nothing is voted on tonight. There may be discussion if you wish, but all matters of business go to the various reference committees, and they will report back at the next meeting. We will begin with the reports of officers as published in THE JOURNAL and handbook:

Report of Executive Secretary: Nothing further to add. Referred to Committee on Reports of Officers.

Report of Treasurer: Nothing further to add. Referred to Committee on Reports of Officers.

Report of Chairman of Council: Nothing to add. Referred to Committee on Reports of Officers.

Report of Executive Committee: This report contains a recommendation for change in the By-Laws covering medical defense, which was referred to the Reference Committee on Amendments to the Constitution and By-Laws. The change provides an amendment to Chapter III, Section 7, of the By-Laws covering medical defense, as follows:

"The Indiana State Medical Association shall in no case provide medical defense against any actions for malpractice against any physician unless such physician was a member of this Association in good standing at the time the services which are the basis of the suit were rendered, and was also a member of the Association at the time the suit was filed."

Referred to Committee on Reports of Officers.

Report of Committee on Public Policy and Legislation:

THE PRESIDENT: Special attention is called to that part of this report in regard to the meeting of laboratory men with the State Board of Health.

W. N. WISHARD, M.D.: I was invited to attend the joint conference of the committee of laboratory men with the State Board of Health, when the agreement was discussed as to changing the form of notice sent out for laboratory service by the State Board of Health. It was agreed, as stated, that on their future communications it should be indicated that such service was to be rendered free only for those who were unable to pay. The contention of the laboratory men, and a righteous contention,

has been that the State Board of Health should not make free examinations for those who were able to pay. The question was discussed pro and con, and it was agreed at this joint conference that the State Board of Health and the laboratory men should try to agree upon some compromise or some settlement of the question. In the printed report it is stated what action was taken by the Board of Health, namely, that the Board would not make free examinations for those who were able to pay. Doctor King stated at the first meeting that it was compulsory, that he thought the law did provide for free examinations. I told him that I happened to have been a member of the State Board of Health for twelve years and was somewhat familiar with the laws relating to sanitary matters, that I had aided Doctor Hurty in outlining some of the laws, and I did not think it was mandatory upon the State Board of Health to make examinations free for those who were able to pay, except and only in case of epidemics, or where there was something threatening the welfare of the community. It was agreed by Doctor King that he would write to the attorney general of the state, and that he would embody in his communication any statement which I, as chairman of the Bureau of Publicity, should prepare, and I wrote and mailed to Doctor King an inquiry of the attorney general as to whether it was mandatory upon the State Board of Health to make free examinations. The attorney general—you have read his written opinion in *THE JOURNAL*, said it was not mandatory, and that under his interpretation of the law it was not intended that such examinations should be made, but that the State Board was charged with the responsibility of doing such things as were indicated to preserve the public health.

I do not want to engage in a controversy, but I feel very deeply that the honor of the Indiana State Medical Association is involved, and the rights of every practitioner of medicine in Indiana. We have a group of men in Indiana—fine fellows—who have qualified themselves earnestly and honestly for laboratory service. They cannot do it without some compensation. It was shown that there were 30,000 Wassermann examinations made in the year terminating last January by the State Board of Health, free of charge. It is a fact that a large proportion of them were made of people who were amply able to pay. What does that mean with relation to that group of men who have spent their time and money to qualify themselves as laboratory men? It simply means that the bread is taken out of their mouths, for they cannot possibly conduct laboratory service in competition with the State of Indiana when the state does it free of charge. And it also means that thousands of dollars of the state's money are being paid and mendicancy encouraged by this method. It is even reported that some physicians have these free examinations made by the State Board and then make a personal charge for the State Board of Health's free service. While I do not know if this is true, the situation certainly makes it possible.

As I understand it, this agreement between the State Board of Health and the laboratory men covers the question satisfactory, but unfortunately I learn through Doctor Rhamy within the past hour that there were inquiries this afternoon as to whether or not the practice is being continued, and as to whether or not there had not been printed within the past few days a new lot of the old cards to be sent out. Doctor Rhamy tells me that he asked Doctor King this afternoon whether this had been done, and Doctor King said they had to have a few printed because they were out of the old ones, and they wanted to bridge over the time until the House of Delegates took action on this matter. The delegates empowered this committee, and this committee has reported that it is a very bad practice and must stop. Therefore, there should have been no new cards printed. This promotion of activities of officers paid by the State to do things free of charge, where the person who received the benefit of the service is able to pay, has no authority whatever in the law. I think the agreement printed in the report, if faithfully lived up to, will settle the question.

I want to congratulate the committee and the labora-

tory men, and I am quite sure the president and other members are heartily in favor of this. I do not want to cast any reflection on anyone because I am a friend of Doctor King and I am sure he wants to act according to the law of the state of Indiana.

A. J. HOSTETLER, M.D. (President State Board of Health): I am a regular, practicing, licensed physician. We did meet with these laboratory men, and the Board agreed to comply with the article that is written in here, and I was quizzed in the same manner that Doctor Wishard has suggested Doctor Rhamy was this afternoon, so I went to our secretary and asked him if such was the case, and he said they were out of cards because he was holding up the printing of new cards until this agreement was approved by this body; that as soon as it is approved he would live up to the agreement exactly as agreed upon by the Board of Health with these laboratory men. He said the cards were not printed yet, but he gave them permission to print a few until the matter was acted upon by this body. I am sure your four members are absolutely conscientious and sincere in this thing, just as much so as the laboratory men, and it will go through as written—I know it will. I will vouch for it. The intention is good. We want to serve the medical profession. The laboratories are subservient to the medical profession. The medical men on this Board are like the rest of us; they cannot do anything without the medical men; you cannot make any health program a success without the medical men. The Health Board can do nothing about correcting defects in the human being—no one but the medical men. We are for the medical men whole-heartedly, and we want to go through with this thing and fight it out because we want to serve the medical profession.

THE PRESIDENT: Before we have any further discussion I think it would be well to have Mr. Hendricks read the resolution. I think you can then discuss it better.

"That there be printed upon these cards sent out by the State Laboratory and requiring the doctor's signature the following:

"This patient is financially unable to pay for this laboratory service and I am making no charge for said service."

"Also that there be printed upon these cards in bold face type, and requiring the signature of the patient:

"I am financially unable to pay for this laboratory test and I know the State Laboratory charges no fee for said laboratory test."

"Also upon these cards shall be printed:

"Unless the signature of both the physician and the patient appear in proper place, this test will not be made by the State Laboratory."

W. N. WISHARD, M.D.: This expresses the honest desire of the State Board of Health to comply, as it does with every request of the State Medical Association, in this matter, and if adopted by the House of Delegates I am sure it will be accepted cordially by everybody. I therefore move the adoption of the report. (Seconded by Doctor Hostetler.)

THE PRESIDENT: According to the Constitution this must lie over until the next meeting, and must go to this committee of which Doctor Porter is chairman. They will report back and you can vote on their recommendations.

J. M. PULLIAM, M. D.: I believe we should get the secretary at once and see what the Board wants him to do. I do not believe we will have any trouble with Doctor King. He is like anyone else in a political position, he caters to the crowd that will help him along, but he is a good executive officer and I believe he will fall in line. I do not believe we want to stir up any strife. We want the Board of Health with us, and if Doctor King will not cooperate—there are plenty of secretaries.

A. S. GIORDANO, M.D.: I was a member of that committee, and I want here to thank publicly Doctor Hostetler for the spirit in which the board members cooperated with us. They saw our problem as medical men, and I think we owe them a vote of thanks for considering the proposition as we discussed it with

them. They were wholly with us and treated us very courteously.

THE PRESIDENT: This will go to the committee now and you will have a chance to vote on it at the next meeting. We want you all to have your say on it at the next meeting.

Report of Committee on Industrial and Civic Relations:

W. W. WASHBURN, M.D.: I want to add a questionnaire that was omitted from the report in THE JOURNAL. There were 125 of these questionnaires sent to the hospitals over the state. Of these, sixty were returned. Seventeen institutions did not handle the cases about which we inquired; four hospitals did not give us any figures at all. That left thirty-nine that made a complete reply to the questionnaire. Of these thirty-nine, in 3,782 cases taken care of, the average collection was 51.2 percent. So you see the problem that we are trying to get some action on through this committee.

Report of Delegates to A. M. A.:

A. E. BULSON, M.D.: I have little to add to what was published in THE JOURNAL. The delegates from the Indiana State Medical Association attended every meeting of the House of Delegates and participated in many of the discussions. I think most of you take the *Journal of the American Medical Association*, and if so you have read the detailed report of what happened in Detroit. As a matter of fact a great deal of the time was taken up with a discussion of the economic features connected with the practice of medicine. From the president down the delegates were discussing the oncoming tide of state medicine and how to stem it. It was provided that there should be a committee appointed by the Association to discuss the economic phase of the practice of medicine, and in connection with that they will discuss the plan proposed by Dr. M. L. Harris, with which I think most of you are familiar.

Much attention was given to the socialization of medicine, which is occurring in various parts of the country, as evidenced by various clinics and public health officials (I say that advisedly), and by certain philanthropic and lay organizations that evidently are interested in socialized medicine, which of course means state medicine.

Doctor Harris' plan proposes that the medical profession shall socialize itself. The argument is made that unless something is done the medical profession will be chaos in a few years, but that the medical profession can stem the tide if it will socialize itself. I am afraid that many of you here have no idea of what is going on round about you, and how insidiously and yet how surely state medicine is being thrust upon you.

THE PRESIDENT: This will be referred to the Committee on Reports of Officers.

Committee on Diphtheria:

THURMAN B. RICE, M.D.: The Diphtheria Report is in THE JOURNAL, and you also will see reports once a month as to what we are doing, keeping you in touch with the diphtheria situation in Indiana. Last year we had less deaths not recorded; this year we hope it will be still less. So far we have had seventy-eight in eight months, as against 158 in ten months last year—in thirty-one counties. In sixty-one counties there were no deaths. We will keep you informed on the subject. We want you to know that we are working on this subject, but we believe it is something that will have to be done locally. We will be glad to give you any assistance we can, but it will have to be the local organization that gets the facts and figures in your community. We believe it cannot be done in six months; we do not expect to eliminate diphtheria in a few months or years; it will take time, and we hope you will stay with us.

THE PRESIDENT: This will be referred to the Committee on Hygiene and Public Health.

Report of Budget Committee:

THOMAS HENDRICKS: This report was not printed in THE JOURNAL along with the Treasurer's report as the budget figures and the actual expenditures will not be available for comparison until the first of the year. This report is always printed in the January number of THE JOURNAL following the midwinter meeting of the Council.

THE PRESIDENT: I will appoint the following committee to prepare memorials on the death of our past-presidents during the year, as follows:

Dr. J. B. Berteling,
Dr. Charles E. Gillespie,
Dr. W. F. Carver.

THE PRESIDENT: We now come to Unfinished Business. You probably remember that there was a resolution introduced in 1927 by Doctor Hostetler, I think on behalf of the Board of Health, in the House of Delegates. It was passed, but it was found to be unconstitutional, and now it comes up again. If Doctor Hostetler wishes to present that resolution again, we will hear him.

Resolution Presented by Doctor Hostetler:

"BE IT RESOLVED, That Article V of the Constitution of the Indiana State Medical Association be amended to read as follows:

"The House of Delegates shall be the legislative and business body of the Association, and shall consist of (1) Delegates elected by the component county societies; (2) the Councilors; (3) the ex-Presidents of the Indiana State Medical Association; (4) a member of the State Board of Health who shall be a member of this Association and shall be selected by the State Board of Health; and (5) ex officio, the President, the Executive Secretary, the Treasurer, and the Editor of THE JOURNAL of this Association, without power to vote, except in case of a tie vote, when the President shall cast the deciding vote."

A. J. HOSTETLER, M.D.: I move that the House of Delegates order the publication of the foregoing resolution twice during the following year in THE JOURNAL of this Association, as provided for in Article XIV of the Constitution governing the amendment thereof.

THE PRESIDENT: This goes directly to the Committee on Amendments to the Constitution and By-Laws.

W. R. DAVIDSON, M.D.: At the last meeting in Evansville there was a resolution to amend the By-Laws which was adopted illegally. I therefore wish to offer this resolution:

"WHEREAS, at the last annual session of the House of Delegates the following resolution was adopted, after amendment:

"That the By-Laws of this Association be amended whereby the Indiana State Board of Health may name a delegate to the Indiana State Medical Association, which delegate shall be a physician and a member of the Indiana State Medical Association.

"RESOLVED, That this Association repeal the action which adopted the above resolution."

I move the adoption of this resolution.

(Seconded by Doctor Miller.)

THE PRESIDENT: This goes to the Committee on Amendments to Constitution and By-Laws. We now will take up any New Business.

F. S. CROCKETT, M.D.: Two years ago the Legislature passed a bill providing for a tuberculosis sanatorium in the southern part of the state. The Governor vetoed that bill on the ground that he had not sufficient information to justify his signing it, but he appointed a Fact-finding Committee which is to report to him at the coming session of the Legislature. That Fact-finding Committee is composed of some twenty or thirty people over the state who are interested in the tuberculosis problem, and Woods H. Caperton, of Indianapolis, is the chairman of that committee. They have discovered that it is impossible to get any correct information as to the number of tuberculosis cases in Indiana. There seems to be a disposition on the part of the doctors not to report tuberculosis as promptly and as conscientiously as they do other communicable diseases. This committee would like a resolution from this House of Delegates expressing some sympathy with the work of the committee, and urging the members of this Association to be more thorough in reporting tuberculosis cases. The reason is that in making up their recommendations they are not of one mind as to what recommendations will cover the problem. They

are discussing tuberculosis as a state-wide problem, and not as a sectional problem in the state, and whether they adopt the plan of one state institution, or go to the New York plan of districts, using such sanatoria as we have at present and adding what may be necessary, will depend to a great extent upon the location and number of tuberculosis cases in the state.

I am not a member of the House of Delegates, but I would like to ask that someone offer a resolution regarding this matter so that the committee may feel that they can go on with their work and report to the Governor their findings with some success.

G. D. MILLER, M.D.: I move that a committee of three be appointed from this House to act upon the request of Doctor Crockett and report back at the next meeting of the House of Delegates. (Motion seconded and carried.)

W. F. CARVER, M.D.: I wish to present a resolution indorsing the establishment of full-time health departments in counties, districts, and larger cities, as follows:

"WHEREAS, the efficiency of full-time health departments in counties, in districts composed of smaller counties, and in larger cities, has been demonstrated in more than five hundred counties in thirty-two states and in the larger cities of these states; and

"WHEREAS, the operation of such full-time health departments under the leadership of competent, trained medical officers has contributed to the protection and promotion of better medical service, and has met the approval of the organized medical profession in the states where such full-time health departments have been in operation; and

"WHEREAS, the present health laws of the State of Indiana do not permit the establishment and maintenance of full-time health departments in the counties or cities of Indiana and do not permit the establishment and maintenance of full-time district health departments in this state; therefore

"BE IT RESOLVED, by the Indiana State Medical Association that this Association does hereby indorse the *principle* of the establishment and maintenance of a better health promotion and health protection service through full-time health departments in and for the State of Indiana; and

"BE IT FURTHER RESOLVED, That the Indiana State Medical Association urges the enactment of a proper, permissive health law that will make it possible for counties, districts composed of smaller counties, and for the larger cities in the State of Indiana to establish and maintain well-organized, adequate, full-time health departments, properly safeguarded and under *trained, efficient medical leadership*."

G. D. MILLER, M.D.: I move that this be referred to the Committee on Public Policy and Legislation. (Motion seconded and carried.)

E. M. SHANKLIN, M.D.: I have a resolution to present, and I would like to take just a few minutes to explain the purpose of the resolution. This resolution is prompted by the fact that a few years ago one member of this Association was Chairman of the Council, Chairman of the Administrative Committee, Chairman of the Finance Committee, and Chairman of the Medical Defense Committee. I happened to be that individual. In order that that may not happen again I wish to offer this resolution:

"RESOLVED, That no member of the Indiana State Medical Association shall serve as a member of two major committees in any one year. The Council shall be considered a major committee."

I move the adoption of this resolution. (Motion seconded and carried.)

F. W. CREGOR, M.D.: I would like to call attention to a defect in the Constitution and By-Laws. The Constitution provides that the Association shall hold an annual session during which there shall be held daily general meetings and such extra meetings as may be provided for, all of which shall be open to registered members and guests. Now the By-Laws provide that the House of Delegates shall meet the day before that

fixed as the first day for the scientific meeting of the annual session. We are in conflict with our By-Laws in meeting today. So that this amendment to the By-Laws may lie over one day and be acted upon tomorrow, I move that the By-Laws be amended to read that "the House of Delegates shall meet the day before *or during* that fixed as the first day of the scientific meeting of the general assembly."

(Motion seconded and carried.)

The question of the next meeting of the House of Delegates was discussed, Dr. J. B. Berteling offering a motion "that the rules of the House be suspended and that the last day of the meeting of the House be advanced to the afternoon of the second day, for the purpose of election of officers and deciding the next place of the annual meeting."

This motion was afterwards withdrawn, and Dr. E. M. Shanklin moved that the House of Delegates meet Thursday afternoon at four o'clock. This motion was seconded and carried.

The president appointed the following committee to report on the request of Doctor Crockett:

Charles E. Gillespie,
George Daniels,
A. E. Bulson.

Thomas Hendricks, executive secretary, urged the members to visit both the Scientific and Commercial Exhibits. The House of Delegates adjourned.

HOUSE OF DELEGATES

SECOND MEETING

SEPTEMBER 25TH, 4:30 P. M.

The House of Delegates convened at four o'clock, with the president, Dr. A. C. McDonald, in the Chair.

Roll-call by Dr. George D. Miller, chairman of the Committee on Credentials, showed the following members present:

| COUNTY | DELEGATE |
|-------------------------|-------------------------------|
| Adams..... | Ernest Franz, Berne |
| Allen..... | J. M. Pulliam, Fort Wayne |
| Cass..... | G. D. Miller, Logansport |
| Decatur..... | I. M. Sanders, Greensburg (A) |
| DeKalb..... | W. K. Templeton, Garrett (A) |
| Delaware-Blackford..... | Elmer T. Cure, Muncie |
| Elkhart..... | A. C. Yoder, Goshen |
| Fayette-Franklin..... | F. J. Spilman, Connersville |
| Floyd..... | P. H. Schoen, New Albany |
| Fountain-Warren..... | A. L. Spinning, Covington |
| Fulton..... | A. E. Stinson, Rochester |
| Hancock..... | Jesse E. Ferrell, Fortville |
| Hendricks..... | O. T. Scamahorn, Pittsboro |
| Henry..... | Walter M. Stout, Newcastle |
| Howard..... | Walter W. Gipe, Greentown |
| Huntington..... | W. H. Vance, Markle |
| Jackson..... | D. J. Cummings, Brownstown |
| Jefferson..... | Oscar A. Turner, Madison |
| Kosciusko..... | C. Norman Howard, Warsaw |
| LaGrange..... | A. J. Hostetler, LaGrange |
| Lake..... | J. A. Craig, Gary |
| | T. W. Oberlin, Hammond |
| LaPorte..... | John Kelly, LaPorte |
| Marion..... | H. H. Wheeler, Indianapolis |
| | H. O. Mertz, " |
| | Raymond C. Beeler, " |
| | W. F. Kelly, " |
| | A. F. Weyerbacher, " |
| | H. G. Hamer, " |
| | Herman Morgan, " |
| | Frank C. Walker, " |
| Montgomery..... | T. Z. Ball, Crawfordsville |
| Morgan..... | E. M. Pitkin, Martinsville |
| Noble..... | W. F. Carver, Albion |
| Orange..... | George Dillinger, French Lick |
| St. Joseph..... | A. S. Giordano, South Bend |
| | R. L. Sensenich, South Bend |
| Shelby..... | W. C. McFadden, Shelbyville |
| Sullivan..... | J. T. Oliphant, Farmersburg |
| Tippecanoe..... | J. C. Burkle, Lafayette |
| | G. K. Throckmorton, Lafayette |

Tipton.....H. B. Shoup, Sharpsville
 Vanderburgh.....Herman M. Baker, Evansville
 Vigo.....C. S. Carmichael, Seelyville
 M. R. Combs, Terre Haute
 Wabash.....O. G. Brubaker, North Manchester
 Whitley.....P. A. Garber, South Whitley

Councillors:

1st District—John H. Hare, Evansville.
 3rd District—Walter Leach, New Albany.
 4th District—H. P. Graessle, Seymour.
 5th District—O. O. Alexander, Terre Haute.
 6th District—B. G. Keeney, Shelbyville.
 7th District—E. E. Padgett, Indianapolis.
 8th District—M. A. Austin, Anderson.
 9th District—F. T. Romberger, Lafayette.
 10th District—E. M. Shanklin, Hammond.
 11th District—I. E. Perry, North Manchester.
 12th District—H. O. Bruggeman, Fort Wayne.
 13th District—J. B. Rogers, Michigan City.

Ex-Presidents:

M. F. Porter, Fort Wayne.
 W. N. Wishard, Indianapolis.
 J. B. Berteling, South Bend.
 David Ross, Indianapolis.
 W. R. Davidson, Evansville.
 E. M. Shanklin, Hammond.
 Charles N. Combs, Terre Haute.
 Frank W. Cregor, Indianapolis.
 George R. Daniels, Marion.
 Charles E. Gillespie, Seymour.

Officers:

President—A. C. McDonald, Warsaw.
 President-elect—A. B. Graham, Indianapolis.
 Treasurer—Wm. A. Doeppers, Indianapolis.
 Editor THE JOURNAL—Albert E. Bulson, Fort Wayne.
 Executive Secretary—Thomas A. Hendricks, Indianapolis.

ELECTION OF OFFICERS

Election of officers resulted as follows:

President-elect—F. S. Crockett, Lafayette.
 Treasurer—Wm. S. Doeppers, Indianapolis.
 Delegates to A. M. A.—Charles N. Combs, Terre Haute; David R. Ross, Indianapolis.
 Alternates—Robert M. Moore, Indianapolis; R. L. Sensenich, South Bend.
 Place of Meeting for 1931—Indianapolis.

Councillors:

2nd District—H. C. Wadsworth, Washington.
 5th District—O. O. Alexander, Terre Haute.
 8th District—M. A. Austin, Anderson.
 11th District—E. O. Harrold, Marion.

REPORTS OF REFERENCE COMMITTEES

Committee on Sections and Section Work: Report as printed in THE JOURNAL adopted.

Committee on Rules and Order of Business: No further report.

Committee on Medical Education and Hospitals: Report as printed in THE JOURNAL adopted.

Committee on Public Policy and Legislation:

MILES F. PORTER, SR.: Your committee desires to report on the first matter, which was concerning the conference between the private laboratory men and the State Board of Health. We desire that you concur in the report printed in the program submitted to you by this committee.

A. E. BULSON, M.D.: I move the adoption of this report. (Motion seconded.)

P. A. GARBER, M.D.: I move that a secret ballot be taken on this. (Motion seconded.)

C. NORMAN HOWARD, M.D.: For a good many years many of the men throughout the state have been having Wassermanns made by the State Board of Health. I think it has been a matter of custom, a matter almost of routine, with a good many men, and very fine men, too—representative doctors. It has been a matter of precedence. Now the question has been brought up as to whether or not it is the correct procedure. I was on this committee of which Doctor Porter was chairman.

Personally, I had always considered it was all right to do it. If that be treason we will have to make the best of it. If this matter had not come up and I had occasion to make a Wassermann tomorrow, I would have charged a small fee for collecting, and would have sent it to the State Board of Health. I have not had occasion to do much of this because in my work I refer patients for Wassermanns to their family physicians, but I have felt about the men who are doing it that it was perfectly all right. Now the question comes up whether this matter, which has run along for years in that way, should continue, or whether it should not. It has seemed to me in thinking it over that it would be better, and fairer, and more in line with the general ideals of the profession, if the custom were changed so that the State Board of Health in the future would do this only for the indigent and those who are unable to pay. That appeals to me now as being the better course, and that is the course for which I voted in the committee, and that is the course for which I shall vote now.

I do not see any reason for a secret ballot, with all respect to Doctor Garber. If anyone is in favor of continuing as we have been, why not say so; it is no crime. Why not come out and say what you want? If, on the other hand, it has been thought, as I am free to say I do think, that the other method is fairer to the laboratory men, then say what you want there. As a member of the committee I agree with Doctor Porter, but I think we ought to take the vote out in the open. If the House of Delegates desires that we continue as in the past, we can say so; and if the House of Delegates decides the other way, let it stand at that.

G. D. MILLER, M.D.: You are doing something here about which you must be very careful. This subject is one of the most important that will come before us. Our inmates of insane asylums are increasing thirty-seven percent, due to syphilis and other diseases we have to fight. I am against this and I hope it does not pass.

W. N. WISHARD, M.D.: It is desirable, I think, to keep in mind the history of this movement in reference to free laboratory service. Gradually the practice of free laboratory examinations has grown up in the State Board of Health until it has, in my opinion, become a pernicious evil. It has become a corrupting influence, and an onion by any other name will not be mistaken for a tuberosc. Examination of specimens, freely made by the State Board of Health for people who are able to pay interferes with the Board doing its part as a public servant for those who deserve it. The opinion of the Attorney General of the State of Indiana, as rendered in writing to the Secretary of the State Board of Health, was to the effect that the State Board of Health was not required to make these examinations at all, that it was not contemplated that the examinations should be made freely for anyone by the State Board of Health, except in case of epidemics or emergencies.

This question was brought up last year and was referred to the Committee on Public Policy and Legislation. That committee invited representatives of the State Board of Health and also me, as chairman of the Publicity Bureau, to meet with them. Doctor King, the secretary of the State Board of Health, insisted that he was compelled to make these examinations. I told him that, having been a member of the State Board for twelve years, and having helped Doctor Hurty in reference to our present sanitary laws, I did not think that was true. I asked that he get an opinion from the attorney general, and he agreed to embody any question which I, as chairman of the Bureau of Publicity, should propound. The essence of the inquiry suggested by me and as embodied by Doctor King with reference to this matter was: "Is it mandatory on the State Board of Health to make these examinations free for those who are able to pay?" The attorney general said in writing (most of you have no doubt read his opinion as published in THE JOURNAL of the Indiana State Medical Association some months ago) that it was *not* mandatory.

What is the effect of making these free examinations, over 30,000 of which were Wassermanns made in the past year? First, it eliminates the men who have devoted their lives and spent their money in preparation for laboratory service; it makes it impossible for them to compete with free examinations made by the State Board of Health, examinations which it is not the function of the State Board to make. Second, it makes it impossible to avoid a great many physicians sending samples to the State Board, getting reports, and charging the patient a little fee for an examination which was made free by the State Board. If we are honest doctors, if we have a high purpose, if we have any idealism, these laboratory men are the men we should stand by. Let us not as physicians lower our ideals, and when these men have labored hard to qualify themselves for scientific pathological work let us not take their bread and butter away from them. I do not believe it is morally right; I do not believe it is professionally right; I do not think it is in any sense ethical to do it. It is run through and through with favoritism—you tickle me and I'll tickle you.

Doctor Hostetler told me within the last half hour that the State Board of Health was unanimously agreed in approving this report, which the laboratory men also approve. It is printed in your Handbook on the twenty-eighth page. I wish Mr. Hendricks would read it. (See pp. 15-16 of this report.)

That is all the laboratory men want; that is what Doctor Hostetler, president of the State Board of Health, who is present, tells me the Board agreed to, and that is all any reasonable person should want. That is what the committee approves. I think no one should object to supporting the report of that committee which has been agreed to by the State Board of Health and the laboratory men, and I think we will save time and do ourselves credit by voting to approve this report.

A. E. BULSON, M.D.: I want to reiterate and approve everything which has been stated by Doctor Wishard, and also to say a word concerning the laboratory men, who certainly seem to need some defense, because it has been noised about that the laboratory men do not do any charity work. I wish to disabuse your minds of that idea. It is not true. I have a considerable quantity of laboratory work to be done. I never yet have sent a sample to the State Board of Health, for the reason that it is much easier to call up and get results from an established laboratory here that is perfectly trustworthy. I never yet have been refused the examination of any specimen sent in when I have said that the patient was indigent or unable to pay the regular fee. The private laboratories do it cheerfully, and I venture to say that there is not a private laboratory in Indiana that will not do as much. I think it is not fair to these laboratory men, who have been educated and licensed to practice, but are limiting their practice to laboratory work, to legislate them out of existence. Someone said it will breed dishonesty. It certainly will breed dishonesty if you carry on what you have now. There are any number of men—I say it shamefacedly—who would take advantage of that and have work done for nothing and charge their patients.

The medical profession always has tried to live up to the traditions of the profession—honorable with patients, with ourselves, and with each other. Let us not do something that will discredit us.

J. M. PULLIAM, M.D.: Doctor Miller spoke of the increase in mental disease from syphilis, but I believe if he looks it up he will find it was not the lack of antisiphilitic treatment but the result of antisiphilitic treatment. Our arsenamine preparations have given us a false impression, and we know now we have used too much of them. It is true that mental disease is on the increase. This year I had charge of the charity work in Fort Wayne, and I am sure I have sent \$500 worth of free work to one laboratory in Fort Wayne. I never have any trouble in getting the laboratory to do free work for charity. I believe this ought to pass. The Board of Health wants it, the laboratory men want it. I really believe we should coincide with this report.

Moved by Dr. W. N. Wishard that the motion of Doctor Garber be tabled. Motion seconded and carried. Vote on Doctor Bulson's motion to adopt the report of the committee carried.

F. W. CREGOR, M.D.: I think with this action it is pertinent that we take cognizance of some situations that may arise in connection with this action. The American Medical Association has means of examination whereby they standardize laboratories. I am told there are three or four laboratories in the state that meet those requirements. We all know there are a lot of laboratories in the state of Indiana, and the question comes up as to whether or not all of these laboratories, or very many of them, meet these requirements.

Another question that confronts us is whether we are going to be asked in a very short time whether or not laboratory work constitutes the practice of medicine. That is a very delicate question. I have heard it discussed here by many physicians, and I know there has been very little difference of opinion.

It is in no way incumbent upon the Indiana State Medical Association to accept the standards as fixed by the American Medical Association, nor does the American Medical Association wish our Association to accept their standards for laboratories, but it is incumbent upon us to fix standards which laboratory men must meet in the state of Indiana. Therefore, Mr. President, I move that a committee be appointed by the Chair to report to the Council at the mid-winter session, that shall examine into this question of fixing a standard for laboratories in the state of Indiana that shall meet with the approval of the Indiana State Medical Association. (Motion seconded by Doctor Bulson and carried.)

MILES F. PORTER, M.D.: With reference to the resolution presented by Doctor Carver in regard to all-time health officers, your committee unanimously recommends the adoption of this resolution. (Motion seconded by Doctor Cregor.)

W. N. WISHARD, M.D.: You are voting on a very serious question. I may say briefly that there are some things that are commendable in having whole-time health officers, but I would like to state a few things that are objectionable.

It should be remembered that a law was proposed in Indiana two years ago which would have empowered the secretary of the State Board of Health to pass on the qualifications of appointees in the various counties. It also should be remembered that such a law would give the secretary the power of removal or suspension. It also should be remembered that there are ninety-two counties in Indiana, and that, while this present resolution cautiously proposes to establish all-time health officers in the larger counties, we know it is only an entering wedge to the introduction of all-time health officers all over the state.

I happen to have visited a group of physicians in another state recently, and in that state they have all-time health officers. In that state also they have a very efficient secretary of the State Board of Health, who is the executive officer. We further know that human nature is much the same in Indiana as in other states, and in this state which I visited the secretary of the State Board of Health is said to have become a dominant factor in the House of Delegates of the State Medical Association. These men, not practitioners of medicine, but all-time health officers, paid a salary by the state or county, which unhappily is often insufficient, cooperate as a unit, and they form a large group from the various counties of that particular state, representing the State Board of Health. Do we want to introduce that sort of thing in Indiana? Do we want to endanger the idealism and the pure motives that have actuated us, and should actuate us, in our legislative work in this House of Delegates?

I am not saying that anybody has anything up his sleeve in this matter; I am only making deductions from experience, and I have come to conclusions based on absolute facts. If you want the House of Delegates to have a representative from every county in the state where

it would be possible to get one in, men dependent for their office on the kindly feeling and official approval of the executive officer of the State Board of Health, then vote for this resolution. If you want to keep our skirts clean and our purposes high, if you want to avoid entangling political alliances, then vote against it.

F. W. GREGOR, M.D.: I think this resolution should be adopted unanimously. I do not know of a single principle that is embodied in it that any member here could not support heartily. There is nothing that the health authorities have a right to engage in that the medical profession is not morally and professionally bound to support. We must move forward; we must lead these organizations which are absolutely dependent upon us for success. So far as I can see these resolutions which have been recommended by the committee of which Doctor Porter is chairman have been studied carefully, the committee recommends their adoption, and I believe they should be adopted unanimously by this House.

MILES F. PORTER, M.D.: I do not care to say anything except that so far as I am concerned as chairman of this committee, and I believe so far as every member of the committee is concerned, we have absolutely no thought except the highest idealism, the highest ethical standards. The sole question before that committee was whether or not concurrence by the House of Delegates in this resolution would result in better service to the community. If so, then I say, Mr. President, that it is up to us to pass it, or we brand ourselves as an aggregation of cowards.

HERMAN MORGAN, M.D.: I agree with some of the remarks made by Doctor Wishard. They are correct. On the other hand, this resolution seems to be far-reaching, both in connection with medical education and the relationship of the field of preventive medicine to other branches of medicine. Preventive medicine has been kicked about somewhat, but there is developing an increasing tendency to give more attention to preventive medicine and not kick it around like a step-child. This affords an opportunity for the State Association to take under supervision and in a measure to control some of the things that have been complained of in the field of public health. Eventually you will see the light, in my opinion, the necessity of having close cooperation between preventive medicine and the other fields. I do not believe that such a law will result in more or less of a political machine at all. It should afford the medical profession of the state an opportunity to have some hand in the various things that are going on in the public health field. Do not kick it out; take it in and regulate it.

H. O. BRUGGEMAN, M.D.: Some years ago I introduced into the Legislature an enabling act similar to this and it was defeated by Doctor King and Doctor Hurty because they wanted compulsory all-time health officers. At the time I took the stand, and do now, that a part-time good man is worth more than an all-time cheap man. We endorse this principle, and what happens? Doctor King presents a bill at the next session of Legislature, and we send telegrams that that is the bill the House of Delegates endorses, and it goes to committee and comes out and we find we have a compulsory all-time health bill covering every county that pays a man \$1,500 or \$2,000, and they become a machine, as Doctor Wishard has said. There is no rush about passing resolutions of this character through the House of Delegates at all. I do not question Doctor Porter's motives, but I do not think he has understood the politics the State Board of Health for years past has been playing through the legislature of the state of Indiana. I object to the House of Delegates passing blindly an indorsement of that kind of legislation unless it has the bill before it. We got the chiropractors bill by just such indorsement and it is the greatest gold-brick the Association ever acquired. If you pass this resolution and it comes before the Legislature you will find that the bill as finally enacted would have all-time compulsory health officers for cities, towns and counties, which will pay \$1,200 to \$1,500 to \$2,000, amended in the Legislature so the chiropractors

and other such practitioners can act as all-time health officers.

W. R. DAVIDSON, M.D.: I move that the motion be tabled. (Motion seconded and carried.)

Report of Committee on Publicity:

September 25, 1930.

To the House of Delegates:

Gentlemen:—Your Reference Committee on Publicity submits the following report:

The most voluminous and perhaps the most outstanding report to claim your attention this year is that of the Bureau of Publicity. The amount of work done by this Bureau is amazing. As a result of its eight years' activity, the Indiana State Medical Association has achieved a prestige in the lay mind never before realized, and certainly never before did we need such an advantage. Contrast our position in the eyes of the public now and eight years ago, and it is evident that on account of this Bureau alone the Association has well justified its existence.

We are sure that our commendation voices your sentiments as we pay tribute to the members of the Bureau, and particularly to the unflinching genius of its leader, Dr. William N. Wishard.

CHARLES N. COMBS, Chairman,
H. H. WHEELER,
U. G. POLAND,
J. F. LOOMIS,
E. M. PITKIN.

Moved by Dr. Miles F. Porter that this report be accepted. Motion seconded and carried.

Report of Committee on Hygiene and Public Health:

PAUL HIGBEE, M.D.: I move that the report of the Committee on Diphtheria as it appears in the Handbook be adopted. (Motion seconded and carried.)

Report of Committee on Amendments to Constitution and By-Laws:

W. F. KELLY, M.D.: There are four amendments. The first is the amendment of Chapter IV, Section 1, of the By-Laws, which provides that the House of Delegates shall meet the day before the day fixed for the first day of the scientific meeting. That is changed to read that the House of Delegates shall meet the day before or during the first day—etc.

Moved by Doctor Porter that this amendment be adopted. Motion seconded and carried.

W. F. KELLY, M.D.: The next is the By-Law introduced by Doctor Shanklin, "That no member of the Indiana State Medical Association shall serve as member of two major committees in any one year. The Council to be considered as a major committee." This also was approved.

Moved by Doctor Porter that this By-Law be adopted. Motion seconded and carried.

W. F. KELLY, M.D.: The next is an amendment to the Constitution, Article V, to be amended as follows: "The House of Delegates shall be the legislative and business body of the Association, and shall consist of (1) Delegates elected by the component county societies; (2) the Councilors; (3) the ex-presidents of the Indiana State Medical Association; (4) a member of the State Board of Health who shall be a member of this Association AND SHALL BE SELECTED by the State Board of Health; and (5) ex officio, the president, the executive secretary, the treasurer, and the editor of THE JOURNAL of this Association, without power to vote except in case of a tie when the president shall cast the deciding vote."

That also was approved.

(This amendment must lie over for one year.)

W. F. KELLY, M.D.: The next is amendment of Section 8, Chapter XII, of the By-Laws, by adding thereto the following:

"The Indiana State Medical Association shall in no case provide medical defense against any actions for malpractice against any physician unless such physician was a member of this Association in good standing at the time the services which are the basis of the suit were rendered; and was also a member of the Association at the time the suit was filed."

There was a question came up in the committee, one member suggesting the possibility of the secretary of a local association not reporting a man to the State Association as being in good standing and having paid his dues. I suppose some secretaries are rather negligent in making their reports, but if a man has paid his dues and can show he has, even though the secretary has not reported that fact, he would be eligible just the same.

C. A. NAFE, M.D.: Suppose a member was in good standing and moved to another state between the time of the original accident and the time he was sued. Would he have any defense? He would not have any defense in the other state, but would he have it here?

W. F. KELLY, M.D.: We have two members of our Indianapolis society who are not living in our state; one is in India.

DOCTOR NAFE: Suppose he were transferred to another state?

F. W. CREGOR, M.D.: I think you will find in the By-Laws of the American Medical Association, which really govern us, that membership follows for a period of a year, so that would take care of the situation for that length of time.

A. E. BULSON, M.D.: I move that this committee be instructed to omit the last portion of this change of the By-Laws. (Motion seconded and carried.)

I move the adoption of this amendment to the By-Laws, to read as follows:

"The Indiana State Medical Association shall in no case provide medical defense against any actions for malpractice against any physician unless such physician was a member of this Association in good standing at the time the services which are the basis of the suit were rendered."

Motion seconded and carried.

On motion of Dr. F. W. Cregor, duly seconded, the motion of Doctor Davidson to repeal the action of the House in amending the By-Laws regarding the State Board of Health naming a delegate to the Indiana State Medical Association was laid on the table.

The Following Reports Were Adopted as Printed:

- Report of Executive Secretary.
- Report of Treasurer.
- Report of Chairman of Council.
- Report of Executive Committee.
- Report of Delegates to A. M. A.
- Report of Committee on Credentials.

Report of Committee on Miscellaneous Business:

September 25, 1930.

To the House of Delegates:

We, the members of the Reference Committee on Miscellaneous Business, move the adoption of the Report of the Committee on Necrology, as reported and printed in the Handbook.

A. C. YODER, Chairman,
ALVA L. SPINNING.

On motion, duly seconded, the above report was accepted.

Report of Committee on Memorials to Past Presidents:

"WHEREAS, it has pleased Almighty God, Great Architect of the Universe, to call to Himself from this vale of sorrow and uncertainty to His heavenly paradise, our beloved members, Dr. G. T. MacCoy, of Columbus, and Dr. S. E. Earp, of Indianapolis, both Past-Presidents of the State Association; therefore

"BE IT RESOLVED, That the Indiana State Medical Association has lost in their untimely deaths two outstanding physicians, both true to the high moral principles enunciated by Hippocrates, our patron saint; that their families have lost loving and devoted husbands and fathers; and their communities have lost prominent citizens; and

"BE IT RESOLVED, FURTHER, That copies of these resolutions be spread on the minutes of the Association; that copies be mailed to the members of the respective families, and that copies be sent to the press of the homes of the deceased.

W. F. CARVER,
C. E. GILLESPIE,
J. B. BERTELING, Chairman."

On motion of Doctor Porter, duly seconded, this resolution was adopted.

Report of Committee on Doctor Crockett's Request:

Resolution for indorsement of the work of the Fact-finding Committee on tuberculosis:

"WHEREAS, the Governor has appointed a Fact-finding Committee to study the problem of the care and treatment of tuberculosis as a state-wide problem; and

"WHEREAS, the committee in pursuing its study of the problem finds that a knowledge of the number and location of all cases of tubercular infection must be known if the best solution is to be had; and

"WHEREAS, this information is not now available owing to failure on the part of many physicians to report cases under treatment; therefore

"BE IT RESOLVED, That the House of Delegates of the Indiana State Medical Association express herewith its complete sympathy and interest in the work of the Governor's Fact-finding Committee and urge that every member of the State Medical Association cooperate by reporting immediately all cases known at this time and promptly report all future cases to the proper health officers."

Moved by Doctor Bulson that this report be adopted. Motion seconded and carried.

S. P. HOFFMAN, M.D.: This House of Delegates evidently works under parliamentary law, but the president of the Association has so many manifold duties that it is not always possible for him to rule on parliamentary procedure. I therefore move that during the next year the executive secretary be instructed so to fortify himself with a knowledge of parliamentary rules that the president of this Association may call upon him whenever he feels he needs help. Let us put the House of Delegates on a firm parliamentary basis. (Motion seconded and carried.)

H. O. BRUGGEMAN, M.D.: I move that the officers of this Association send a telegram of greeting to ex-President Dr. Charles Good, of Huntington. (Motion seconded and carried.)

E. O. DANIELS, M.D.: I am sure we all are very grateful for the splendid entertainment that has been provided for us, and I therefore move that the House of Delegates thank the officers, and particularly the local committee, who have so well entertained the Association at this session. (Motion seconded and carried.)

E. E. PADGETT, M.D.: I move an expression from the Association to our retiring president, Doctor McDonald, for the efficient manner in which our meetings have been conducted. (Motion seconded and carried.)

A. C. McDONALD, M.D.: It is very kind of you. I appreciate very much the kindness and courtesy you have shown me. I am not a parliamentarian, and if I trod on anyone's toes I am very sorry for it.

The House of Delegates adjourned *sine die*.

THE COUNCIL

FIRST MEETING

(Fort Wayne Session, September, 1930)

The Council convened at 11:15 a. m. Wednesday, September 24, 1930, in Room 302, Anthony Hotel, Fort Wayne, Indiana. The meeting was called to order by E. E. Padgett, chairman. Roll call showed the following present:

COUNCILORS:

- 1st District—John H. Hare, Evansville.
- 3rd District—Walter Leach, New Albany.
- 4th District—H. P. Graessle, Seymour.
- 5th District—O. O. Alexander, Terre Haute.
- 6th District—B. G. Keenev, Shelbyville.
- 7th District—E. E. Padgett, Indianapolis.
- 8th District—M. A. Austin, Anderson.
- 9th District—F. T. Romberger, Lafayette.
- 11th District—J. E. Perry, North Manchester.
- 12th District—H. O. Bruggeman, Fort Wayne.
- 13th District—J. B. Rogers, Michigan City.

OFFICERS:

- A. C. McDonald, President.
- A. B. Graham, President-elect.

Wm. A. Doeppers, Treasurer.

Albert E. Bulson, Editor of THE JOURNAL.

EXECUTIVE COMMITTEE:

David Ross, Chairman.

William H. Kennedy.

Thos. A. Hendricks, Executive Secretary.

COUNCILOR-ELECT:

11th District—E. O. Harrold, Marion.

The reading of the minutes for the midwinter meeting of the Council was dispensed with as the councilors had a complete report on that meeting in the January number of THE JOURNAL.

Councilor District Reports: As each councilor made a short, informal report concerning matters in his own district in the September number of THE JOURNAL and in the handbook for the House of Delegates, and as no further comments, additions or changes were made, these reports stand as originally printed.

Report of Councilor of Ninth District: F. T. Romberger, councilor for the Ninth District, reported in detail the situation in a county in his district where the dues of an individual physician to the State Association were being held up without this individual physician having been given a chance to be heard by his county medical society. Upon motion of Doctor Bruggeman, the executive secretary was instructed to notify the secretary of this county medical society that the physician in question is rightfully a member of his local county medical society and the State Medical Association until expelled in regular form, instructing the secretary of this county society to send a check for the dues of this physician to headquarters. Motion seconded by Doctor Keeney and Doctor Perry, and carried.

Technical Exhibit: The preliminary financial report on the technical exhibit showed there were twenty-nine exhibits and all the money had been collected or accounted for.

Scientific Exhibit: The scientific exhibit, which has been created as a part of the regular program of the annual session, contained the following displays:

I. Central State Hospital, Indianapolis:

1. Neurosyphilis and Malaria Treatment of General Paresis.
2. Motion picture exhibit entitled:
A motion picture film illustrating the pathology of syphilis of the central nervous system, and also the symptomatology of the various typical forms of neurosyphilis.

II. Motion pictures:

1. "Mental and Nervous Diseases."
2. "Cisternal Puncture," Indiana University School of Medicine.
3. Central State Hospital:
A motion picture film illustrating the pathology of syphilis of the central nervous system, and also the symptomatology of the varied typical forms of neurosyphilis.
4. Riley Hospital.
5. State Board of Health.
6. Indiana Division of the Child Hygiene Department.

III. Methodist Hospital of Indianapolis:

Facilities of the Modern Hospital as an Aid to Diagnosis.

IV. "Mental and Nervous Diseases."

V. Indiana University School of Medicine:

1. Department of Bacteriology.
2. Department of Surgical Pathology.
3. Department of Biochemistry and Pharmacology.

VI. Riley Hospital:

Display of the Department of Orthopedic Surgery.

VII. State Board of Health:

General exhibit.

VIII. Indiana Division of the Child Hygiene Department.

Suggestion of President-elect in Regard to Type of Program for 1931: Dr. A. B. Graham, president-elect, made the following suggestions concerning the 1931 program:

1. A full three-day session.
2. Wednesday morning and afternoon, golf. Wednesday night, smoker, entertainment and theater party.
3. The abolition of section programs for 1931, the Thursday and Friday meetings to be devoted to general meetings; the day-time program to be made up entirely of Indiana talent, some man of national reputation being invited to address an evening meeting Thursday night, preferably a banquet. Two men, if possible, from each of the thirteen districts to be selected for the principal papers on the general program. Four men from each district to act as discussants. This will make a total of twenty-six speakers and fifty-two discussants, all Indiana men. Every councilor district is to be represented and the Program Committee is to confer with the councilor for talent in each district. The program is to be completed in two or three months' time and guarantees that with one general program each speaker will have an audience of between 300 and 500.

Doctor Austin spoke in favor of Doctor Graham's program. He pointed out that we were in a transition period and that we are having a multiplicity of medical meetings, which means a cutdown in the attendance at many of the local scientific meetings. He made a plea for the development of talent from our own state.

Doctor Keeney thought that Doctor Graham's idea would mean the practical elimination of the scientific program committee, which is made up of a general chairman selected by the president and the nine section officers. Doctor Graham said that this would not do away with the duties of the section officers in any way. They would have a chance to preside at the general meetings. The final selection of the speakers would be up to the committee, but each councilor would recommend speakers from his district. Doctor Bruggeman said that this was fundamentally an Indiana State Medical Association session and he thought that a program along the lines suggested by Doctor Graham would enable the State Association to put on a real Indiana program.

Upon a motion by Doctor Graham the Council went on record favoring the return to general meetings for 1931, the Program Committee to retain its present duties but to be aided by the suggestions of the councilors of the respective districts. Motion seconded and carried.

Public Meeting at Fort Wayne: Following discussion, motion made by Doctor Austin, seconded by Doctor Ross, that the State Association pay the necessary expense of the public meeting held at the Shrine Auditorium Thursday evening. It was estimated that this meeting would cost about \$450. Doctor Bulson said that if there was any surplus from the funds raised by the local entertainment committee, this would go to help defray the expenses of the public meeting and relieve the State Association from the payment of the total cost of the meeting. Motion carried.

Future Public Meetings: It was moved by Doctor Bulson, seconded by Doctor Keeney, that any public meeting at any future annual session of the State Medical Association be under the direction and control of the Indiana State Medical Association, the selection of the speakers, the arrangements, and the entire public meeting being under the auspices of the state association, and that the Budget Committee be instructed that an item be allowed in the budget for the expense of such a meeting not to exceed \$500. Motion carried.

Date of Midwinter Meeting of the Council: Upon the suggestion of Doctor Keeney the Council went on record favoring the holding of the midwinter meeting of the Council on Wednesday of the first week in December.

Publication of Certified List in THE JOURNAL: The Council went on record approving the publication of the certified list of physicians which appears in THE JOURNAL.

Conflict in District Meetings: It was brought to the attention of the Council that there was often a conflict in the annual spring district meetings. The fourth, ninth and eleventh districts all conflicted last year. It was suggested that all councilors send the dates of their district meetings, just as soon as these dates are selected, to

headquarters office. Each councilor was asked to send in the name of the president and the secretary of his councilor district just as soon as practicable after these officers are elected in order that the headquarters office may get in touch immediately with these officers.

New Business: Motion made by Doctor Keeney that the chairman appoint a committee to be composed of the chairman and two other members to draw up a contract to obtain between the editor of *THE JOURNAL* and the State Medical Association and to submit this at the next midwinter meeting of the Council. Seconded by Doctor Bruggeman. Motion carried.

Doctor Hare asked that a matter of new business be placed upon the program to be brought up by him at the midwinter meeting of the Council.

There being no further business, the meeting was adjourned.

THOMAS A. HENDRICKS,
Executive Secretary.

THE COUNCIL SECOND MEETING

(Fort Wayne Session, September, 1930)

The second meeting of the Council was held at 5:00 p. m. Thursday, September 25th, at the Anthony Hotel, Fort Wayne, Indiana. Minutes of the previous meeting were not read. Roll call by the chairman showed the following members present:

- 3rd District—Walter Leach, New Albany.
- 4th District—H. P. Graessle, Seymour.
- 5th District—O. O. Alexander, Terre Haute.
- 6th District—B. G. Keeney, Shelbyville.
- 7th District—E. E. Padgett, Indianapolis.
- 9th District—F. T. Romberger, Lafayette.
- 10th District—E. M. Shanklin, Hammond.
- 11th District—I. E. Perry, North Manchester.
- 12th District—H. O. Bruggeman, Fort Wayne.

A letter on tuberculosis clinics was presented to the chairman of the Council with instructions that it be read at the midwinter meeting in Indianapolis.

The chairman announced that two committees were to be appointed, one in accord with Dr. Keeney's motion made at the first council meeting, and a second to be appointed by Dr. McDonald. The chairman announced that this committee would be appointed in the near future and would be ready to report at the midwinter meeting. The committee appointed by Doctor McDonald is likewise to report at the midwinter meeting.

With no further business the Council adjourned to meet in Indianapolis on Wednesday, December third.

THOMAS A. HENDRICKS,
Executive Secretary.

GENERAL MEETING FIRST MEETING

(Fort Wayne Session, September, 1930)

The first general scientific meeting was held in the Ballroom of the Anthony Hotel, Fort Wayne, Indiana, Wednesday, September 24, 1930, convening at one-thirty, the president, Dr. A. C. McDonald, of Warsaw, in the chair.

CHARLES J. ROTHSCILD, M.D., President Fort Wayne Medical Society: Mr. President, and Members of the Indiana State Medical Association: The Allen County Medical Society, better known as the Fort Wayne Medical Society, has honored me with its presidency. It is my pleasure, on behalf of the society, to extend to you our cordial greetings and felicitations. A program of scientific work and entertainment has been arranged for you, and we trust that your stay in Fort Wayne will be worth while and pleasurable. We extend you a most sincere and heartfelt welcome.

The Fort Wayne Medical Society, fearing you might not have enough entertainment, have arranged something in the nature of a surprise for our good friend, the president, Doctor McDonald. After the theatre this evening there will be an informal reception where refreshments will be served at the Chamber of Commerce, just around the corner from the theatre. This will give you

an opportunity to greet your president, Doctor McDonald, and your president-elect, Doctor Graham. We hope all the members and their ladies will be present.

H. O. BRUGGEMAN, M.D.: Ladies and Gentlemen: At this time I have the pleasure of introducing to you a friend of the medical profession of this city, a man who recently has been a victim of mine in the way of a surgical operation, and who is now serving his fourth term as mayor of Fort Wayne—Hon. William J. Hosey.

HON. WILLIAM J. HOSEY, Mayor of Fort Wayne: Mr. President, Members of the Indiana State Medical Association: It is my duty, and I find it a real duty, attending conventions, conferences and assemblies that come to our city—as time goes on it has become a real job. A few years ago this kind of gathering in our city was quite infrequent, and naturally, with only a few such meetings held in the course of a year, it was very easy to find something appropriate to say on each occasion. But only yesterday I was requested to be present at a meeting of the state, county and city health boards assembled here. It is very gratifying to find that the Indiana State Medical Association is here at the same time, and what was proper to say yesterday will not be very much out of place today.

It is an old custom that when visitors come to our city for a brief stay, the chief executive of the city shall give them a welcome and greeting. That custom goes back to the dawn of history I believe. As far as I am concerned personally, it is an agreeable duty. The doctors and members of the medical profession of the state are doing a great work for the public, though not exactly of the same character as our state, county and town health officers. The division of public health in the city and state government is a very important one. That has been realized by people of vision and worth-while thinking ability, and yet a few years ago the functioning part of the health authorities seemed to be of little or no importance in the minds of the people. We should realize that health is the greatest asset the public has. You may have wealth and material possessions which are highly prized, but if you are poor in health you are poor in every way. Therefore, those engaged in the work of protecting the public health are not only carrying on a noble work, but a very necessary one.

The Indiana State Medical Association I take it can do a large and valuable work by actively and continuously cooperating with the state, county and local health officers, board and bureaus. If they fail to do so the work of the local health boards may be very poor, owing to the fact that the resident doctors and physicians have not given the proper cooperation. It is important that in all cases the communicable diseases, the infectious and contagious diseases that so readily spread and disseminate, shall be governed rapidly, since a vast amount of harm would result from negligence in taking care of these epidemics. I was impressed yesterday with the fact that the public health officers, both local and state, are performing a great duty, a wonderful work, and the real value of it is an unknown quantity, and that is the reason why so many people do not give health officers proper credit for their work. Their work is largely preventive, not remedial. They prevent things that are harmful to the public in the way of detecting and curbing and handling diseases of various kinds before they become epidemic.

In our city we have a very vigilant corps of workers and a proud record as to our health board. We were pioneers in certain ways in our local health board, as we drafted and enforced milk and dairy ordinances and other laws that proved of great value and were copied by other towns.

Another feature of the health work is in regard to the children. We find that in the schools there are many under-nourished children, and taking care of those children is a great work. I might go on and specify numerous ways in which the medical profession is cooperating with the state health officials, increasing the value of their work, but time will not permit, so I merely mention a few of the outstanding points.

It is certainly a pleasure to have the State Medical Association here, and I believe you will find ours a very hospitable city. You will find it a very good place in which to practice medicine, or any other profession—to have a home and rear a family. I hope before you go back home you will visit the different parts of the city and see the institutions we have here, see the attractions of the city in a business, commercial and social way. If you do that you will be carrying out my sincere desire. I hope you will come back, and, indeed, we would be glad to have you meet here every time. I wish you success in your present meeting.

The president, Dr. A. C. McDonald, of Warsaw, read the president's address. (Printed in this number of THE JOURNAL.)

Dr. H. O. Mertz, Indianapolis, read a paper entitled "The Lateral Pyelogram: a Neglected Procedure in Diagnosing Various Abdominal Conditions." Discussed by Drs. George Kimball, LaPorte; A. J. Sparks, Fort Wayne; P. E. McCown, Indianapolis, and H. O. Mertz.

Dr. Walter R. Parker, Detroit, professor of ophthalmology, University of Michigan Medical School, read a paper entitled "Some Eye Conditions in Children of Interest to the General Practitioner." There was no discussion of this paper.

Dr. James B. Herrick, Chicago, emeritus professor of medicine, Rush Medical College, read a paper entitled "The Importance of the History and Physical Examination in Diagnosis." There was no discussion of this paper.

Dr. H. W. Garton, Fort Wayne, read a paper entitled "Compensable Hernia." This paper was discussed by Drs. C. F. Fleming, Elkhart, and H. W. Garton.

The Wednesday afternoon meeting adjourned.

GENERAL MEETING

SECOND MEETING

(Fort Wayne Session, 1930)

The Thursday afternoon meeting convened at two-ten, the president, Dr. A. C. McDonald, in the chair.

The president announced that the registration was 1,075—the largest on record.

Moved by Dr. W. F. Carver that a rising vote of thanks be extended to the medical men of Fort Wayne and to the city in general for the manner in which they received and entertained the State Medical Association. Unanimously carried.

Dr. Roscoe Beeson, Muncie, read a paper entitled "State Medicine." Discussed by Drs. M. A. Austin, Anderson, and Roscoe Beeson.

Dr. Jacob A. Borgen, Rochester, Minnesota, read a paper entitled "The Diagnosis of Malignant Diseases of the Colon and Rectum."

Dr. Fred W. Rankin, Rochester, Minnesota, read a paper entitled "The Treatment of Malignant Disease of the Colon."

There was no discussion of these papers.

Dr. Isadore Raphael, Evansville, read a paper entitled "Practical Infant Feeding." Discussed by Drs. J. B. Rogers, Michigan City, and A. C. Worley, Fort Wayne.

Dr. M. Edward Davis, Chicago, read a paper (illustrated by motion pictures) entitled "The Forceps Operation." There was no discussion of this paper.

The Indiana State Medical Association adjourned *sine die*.

SECTION OF MEDICINE

(Fort Wayne Session, 1930)

Thursday, September 25

The Section on Medicine met in the ballroom of the Hotel Anthony, Fort Wayne, Indiana, and was called to order at 9:00 a. m. by the chairman, Dr. Robert M. Moore, Indianapolis.

B. L. HARRISON, M.D., read a paper entitled "Abdominal Manifestations in Diseases of the Chest: Some Clinical Observations." Discussed by Drs. Robert G. Moore, Vincennes, and Harry P. Ross, Richmond.

H. H. WHEELER, M.D., Indianapolis, read a paper entitled "The Ano-rectal Region and Its Relation to Disease." Discussed by Drs. Stanley McClure Casey,

Huntington; I. E. Perry, North Manchester; E. S. Parmenter, Detroit, Michigan, and in closing by Doctor Wheeler.

HERMAN M. BAKER, M.D., Evansville, read a paper entitled "Fusiform Spirochetal Infection as a Cause of Bronchial Asthma." Discussed by Drs. Harold Otis Williams, Kendallville; Robert V. Hoffman, South Bend, and in closing by Doctor Baker.

ROBERT V. HOFFMAN, South Bend, read a paper entitled "In Behalf of Private Practice." Discussed by Drs. Charles A. Sellers, Hartford City, and Albert Eugene Sterne, Indianapolis.

MAURICE JOSEPH BARRY, M.D., Indianapolis, read a paper entitled "The Nature and Treatment of Massive Collapse of the Lung." Discussed by Dr. Russell W. Lavengood, Marion.

JAMES H. STYGALL, M.D., Indianapolis, read a paper entitled "The Diagnosis and Treatment of Non-tuberculous Suppurative Lung Lesions." (No discussion.)

The chairman expressed his personal appreciation to the essayists and discussants for their kindness and cooperation in making the meeting a success.

Election of Officers: The following officers were elected for the ensuing year:

Chairman—Dr. Harvey L. Murdock, Fort Wayne.

Vice-chairman—Dr. Herman M. Baker, Evansville.

Secretary—Dr. B. G. Keeney, Shelbyville.

Adjourned.

SECTION ON SURGERY

(Fort Wayne Session, 1930)

Thursday, September 25

The Section on Surgery met in the general dining-room, Hotel Anthony, Fort Wayne.

The meeting was called to order at 9:00 a. m. by the chairman, Dr. H. C. Ruddick, Evansville.

Dr. Cleon A. Nafe, Indianapolis, read a paper entitled "Postoperative Complications of Abdominal Operations and Their Treatment." There was no discussion.

Dr. Walter H. Baker, South Bend, read a paper entitled "Common Surgical Tumors in the Colon." Discussed by Dr. W. D. Gatch, Indianapolis.

Dr. Floyd Romberger, Lafayette, read a paper entitled "The Anesthetist's Viewpoint." Discussed by Dr. Marie Kast, Indianapolis.

Dr. R. A. Milliken, Indianapolis, read a paper entitled "The Conservative Treatment of Bone and Joint Tuberculosis: An End Result Study." Discussed by Drs. E. Vernon Hahn, Indianapolis, and E. B. Mumford, Indianapolis.

Dr. E. B. Mumford, Indianapolis, read a paper entitled "Joint Surgery." There was no discussion.

The following officers were elected:

Chairman—W. E. Tinney, Indianapolis.

Vice-chairman—E. Vernon Hahn, Indianapolis.

Secretary—George A. Collett, Crawfordsville.

The meeting adjourned at 11:30 a. m.

SECTION ON OPHTHALMOLOGY AND OTOLARYNGOLOGY

(Fort Wayne Session, 1930)

Thursday, September 25

The Section on Ophthalmology and Otolaryngology convened Thursday morning at nine, the chairman, Dr. B. D. Ravdin, of Evansville, presiding.

Dr. Carl B. Sputh, Indianapolis, read a paper entitled "Zinc Ionization in Treatment of Rhinitis and Sinusitis." Discussed by Drs. C. H. McCaskey, Indianapolis; B. D. Ravdin, Evansville, and Carl B. Sputh.

Dr. Edward A. Pape, Indianapolis, read a paper entitled "Treatment of Cataract Cases by Lens Extract." Discussed by Drs. B. W. Egan, Logansport; O. G. Brubaker, North Manchester; W. F. Hughes, Indianapolis; B. D. Ravdin, Evansville, and Edward A. Pape.

At this time the chairman presented Dr. J. F. Barnhill, president-elect of the American Academy of Ophthalmology and Otolaryngology, and tendered to him the greetings of the Section.

Dr. F. J. Spilman, Connersville, read a paper entitled "Some Reasons Why the Dentists and Otolaryngologists Should Become Better Acquainted." Discussed by Drs. J. D. McKay, Marion, and F. J. Spilman.

Dr. Charles J. Adams, Kokomo, read a paper entitled "Practical Refraction." Discussed by Drs. E. M. Shanklin, Hammond; Orris T. Allen, Terre Haute, and Charles J. Adams.

Dr. H. A. VanOsdol, Indianapolis, read a paper entitled "The Systemic Effect of Nasal Hyperplasia as It Affects the Nasal Ganglion." Discussed by Drs. M. G. Erehart, Huntington; J. F. Barnhill, Indianapolis; B. W. Egan, Logansport; C. H. McCaskey, Indianapolis, and H. A. VanOsdol.

Dr. Orris T. Allen, Terre Haute, read a paper entitled "Some Referred and Reflexed Eye Disturbances." Discussed by Drs. Byron N. Lingeman, Crawfordsville; Charles S. Stewart, Auburn, and Orris T. Allen.

Dr. William S. Tomlin, Indianapolis, read a paper entitled "Nasal Obstruction." Discussed by Drs. H. W. Eby, Goshen, and F. V. Overman, Indianapolis.

On motion of Dr. J. F. Barnhill the secretary was instructed to send a telegram of condolence to Dr. Sam Skillern, of Philadelphia, because of the death of his brother, Dr. Ross H. Skillern, which occurred in Philadelphia, September 20th.

Election of officers resulted as follows:

Chairman—Dr. F. V. Overman, Indianapolis.

Vice-chairman—Dr. Hugh A. Kuhn, Hammond.

Secretary—Dr. C. A. Robison, Frankfort.

The Section adjourned.

INDIANA STATE MEDICAL ASSOCIATION OFFICERS FOR 1931

President.....Dr. A. B. Graham, Indianapolis

President-elect.....Dr. F. S. Crockett, Lafayette

Treasurer.....Dr. William A. Doeppers, Indianapolis

Executive Secretary.....Thomas A. Hendricks, Indianapolis

SECTION ON MEDICINE:

Chairman.....Dr. Harvey L. Murdock, Fort Wayne

Vice-chairman.....Dr. H. M. Baker, Evansville

Secretary.....Dr. B. G. Keeney, Shelbyville

SECTION ON SURGERY:

Chairman.....Dr. W. E. Tinney, Indianapolis

Vice-chairman.....Dr. E. Vernon Hahn, Indianapolis

Secretary.....Dr. Geo. L. Collett, Crawfordsville

SECTION ON OPHTHALMOLOGY AND OTOLARYNGOLOGY:

Chairman.....Dr. F. V. Overman, Indianapolis

Vice-chairman.....Dr. Hugh A. Kuhn, Hammond

Secretary.....Dr. C. A. Robison, Frankfort

INDIANA STATE BOARD OF HEALTH

DIVISION OF COMMUNICABLE DISEASES

MONTHLY REPORT, AUGUST, 1930

Morbidity reports were received from eighty counties in the state during the month. Nine counties, Benton, Blackford, Decatur, Franklin, Jefferson, Ohio, Pulaski, Starke and Steuben, sent in negative reports, while Brown, Perry and Pike counties did not report. There were 734 negative report cards sent in this month. The current prevalence of communicable diseases as indicated by the reports from the health officers of the state are shown below by the number of diseases from the urban and rural population as follows (urban includes cities of 2,500 and over, rural all under 2,500 population):

| Diseases | Total | Urban | Rural |
|----------------------|-------|-------|-------|
| Tuberculosis | 162 | 107 | 55 |
| Chickenpox | 8 | 7 | 1 |
| Measles | 25 | 13 | 12 |
| Scarlet fever | 73 | 47 | 26 |
| Smallpox | 116 | 60 | 56 |
| Typhoid fever | 68 | 22 | 46 |
| Whooping cough | 109 | 93 | 16 |
| Diphtheria | 45 | 31 | 14 |
| Influenza | 16 | 0 | 16 |
| Pneumonia | 3 | 1 | 2 |
| Mumps | 11 | 8 | 3 |
| Poliomyelitis | 15 | 10 | 5 |

| | | | |
|-----------------------|----|----|---|
| C. S. meningitis..... | 25 | 20 | 5 |
| Trachoma | 1 | 0 | 1 |
| Undulant fever | 8 | 2 | 6 |

Smallpox. A decline of 159 cases is noted as compared with last month, when 275 cases were reported. Corresponding month last year reported 114 cases. Thirty counties in the state reported cases. Those reporting the greatest number of cases are as follows: Delaware, 15; Howard, 20; Marion, 9; Monroe, 12; Morgan, 10; Switzerland and Wayne, 5 cases each, respectively.

Diphtheria. Corresponding month last year reported 63 cases, which shows a decline for this month. The estimated expectancy was 81 cases. There were 34 cases last month.

Measles shows a marked decline over last month and same month last year when 148 and 91 cases were reported, respectively. The estimated expectancy was 75 cases. The estimate is based on the experience of the last seven years.

Chickenpox. The number of cases this month is the least number of cases reported from any one month for the last six years. Last year same month reported 19 cases. There were 44 cases last month.

Scarlet Fever. One hundred twenty-two cases were reported for last month; 190 cases reported the corresponding month last year. In the last seven years this month reported the least number of cases. The estimated expectancy was 112 cases.

Typhoid Fever shows an increase. Last month reported 32 cases. Last year reported 43 cases. In August, 1925, there were 219 cases reported.

C. S. Meningitis has increased ten cases over last month. Marion county reported 11 cases; Clinton, 5; Jay, 3; Lake, 2; Harrison, Tippecanoe, Vanderburgh and Wells counties each reported one case, respectively.

H. W. McKANE, M.D.,
Collaborating Epidemiologist,
Indiana State Board of Health.

DIVISION OF COMMUNICABLE DISEASES

MONTHLY REPORT, SEPTEMBER, 1930

Morbidity incidence for the current month shows a decrease of the principal diseases over the previous month, except scarlet fever, diphtheria and poliomyelitis. The prevalence is shown in a summary below.

Scarlet fever increase shows the normal trend. The disease will increase as the cold season advances. Seventy-three cases were reported the preceding month and 128 cases this month. The corresponding month the previous year 132 cases were reported. The normal expectancy for September is 145 cases. The estimated expectancy is based on the experience of the last seven years. Quarantine is about the only effort made for control. Serum prophylaxis is not in popular use in Indiana.

Diphtheria. The seasonal increase is shown with fifty-eight cases reported. Forty-five cases last month. Eighty-five cases same month the previous year. The estimated expectancy was 128 cases for the period mentioned above. The great effort that is being made with toxin-antitoxin immunization is not as efficacious as it should be.

Poliomyelitis. A marked increase is noted. Thirty-nine cases during the month and fifteen cases in August. Twenty-one cases in July. These cases for the last three months have been sporadic with only one or two cases in a county, except in July sixteen cases were reported from Perry county and fifteen cases in Marion county during the month. The number of cases reported this month is the greatest number that has been reported in September according to record. The disease has been prevalent in a number of states, but is subsiding slowly.

Smallpox shows a decline over the previous month, seventy-three cases. The preceding month 116 cases were reported. September is an off month for smallpox. The normal average for the month is forty-three cases. The disease will increase as the season advances like an arithmetical progression when the people are shut up in schools and homes. This is when contact is greatest. Early vaccination and revaccination is the answer.

Typhoid fever made a slight decline. Fifty-four cases were reported. Sixty-eight cases last month. Thirty-two cases is the record for July. The same month last year forty-four cases were reported. September is a part of the typhoid season. The great drought in the southern part of the state has not increased the prevalence of the disease. The estimated expectancy was 121 cases.

Tuberculosis. Two hundred seventeen cases were reported during the month; 162 cases last month. A determined effort is being put forth by tuberculosis workers to induce physicians to report their cases. The law specifies that physicians shall report their cases of tuberculosis within five days after such fact comes to their knowledge. These cases are reported direct to the State Board of Health on special franked cards furnished to every practicing physician in the state by the U. S. Public Health Service through the health officer having jurisdiction.

Cerebro-spinal meningitis is declining. Thirteen cases this month. Twenty-five last month. Two cases each were reported from Jefferson and Lake counties and one case each from Clinton, Monroe, Vanderburgh and Vermilion counties. Indianapolis reported five.

The name and number of diseases reported during the month not mentioned above are as follows: Chickenpox, 34; measles, nine; whooping cough, 56; influenza, eight; pneumonia, two; mumps, four; trachoma, two; undulant fever, three; malaria, one, and erysipelas, one case.

H. W. MCKANE, M.D.,
Collaborating Epidemiologist,
Indiana State Board of Health.

ELKHART COUNTY MEDICAL SOCIETY

The Elkhart County Medical Society met at the Hotel Elkhart, September 4, 1930. After dinner the meeting was called to order by the president, Dr. W. A. Stauffer. The minutes of the last two meetings were read and approved.

The application for membership of Dr. E. G. Koehler, having been signed by the Board of Censors, was presented. It was moved and seconded that Doctor Koehler be accepted to membership. Motion was carried.

The application of Dr. G. B. Patrick, of Elkhart, was presented and referred to the Board of Censors.

The following program was presented:

"Acute Empyema"—Dr. Joseph W. Gale, Associate Professor of Surgery, University of Wisconsin.

"Primary Fungus Infection of the Lung"—Dr. W. D. Stovall, Director State Laboratory of Hygiene, Madison, Wisconsin.

The papers were discussed by Drs. D. D. Todd, G. W. Bowdoin, A. C. Giordano, Green, J. C. Fleming, W. A. Stauffer, A. C. Yoder, J. A. Work and Doctors Gale and Stovall in closing.

The meeting adjourned at 10:00 p. m.

There were forty-two doctors present.

S. T. MILLER, M.D.,
Secretary.

TIPPECANOE COUNTY MEDICAL SOCIETY

Lafayette, Ind., Sept. 11, 1930.

The Tippecanoe County Medical Society met in regular session at Lincoln Lodge, dinner at 6:15 p. m. Following the dinner President McCay presided.

The minutes of the June meeting were read and approved as read.

A number of communications were read, among those being applications from new members—Dr. G. L. Derhammer and Doctor Pippenger. An application for membership by transfer from Montgomery county of Dr. Ira Cole, formerly of New Richmond, Indiana, was read and motion was made and carried unanimously that Doctor Cole be accepted as member by transfer from Montgomery county, Indiana.

Bills for the month were: Four guest meals, \$4.00.

President McCay introduced the speaker of the evening, Dr. Max A. Bahr, superintendent of Central State Hospital, Indianapolis, Indiana. Doctor Bahr very ably presented the subject, "Mental Mechanisms in Health and Disease." A number of questions were asked the speaker,

bringing out many important points upon this subject.

Motion to adjourn was carried.

J. C. BURKLE,
Secretary.

SULLIVAN COUNTY MEDICAL SOCIETY

The Sullivan County Medical Society met in regular session on October 3, 1930, at 8:00 p. m. in the dining-room of the Mary Sherman Memorial Hospital.

The following cases were presented:

A case of multiple prickle cell carcinoma of the skin of the entire body was presented by Dr. J. R. Crowder. This man already has had thirty-two of these small bodies removed and still has some seventy on the surface of his body.

Dr. C. F. Briggs reported a case of acute yellow atrophy of the liver with autopsy. He also reported a fatal case of pneumonia with abscess of the right lung with rupture into the bronchus and pleural cavity.

Doctor Briggs also made a final report on a case shown at the September meeting which had since died. This case being one of septic sore throat in a twelve-year-old boy which was followed by subacute bacterial endocarditis and an acute nephritis.

Dr. Paul Higbee reported an autopsy with findings of a case of sudden death from aneurism of the aorta with rupture within the pericardium. Specimen removed at the time of autopsy was shown.

J. B. MAPLE, M.D.
Secretary.

WOMAN'S AUXILIARY TO THE DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY

September 9, 1930.

At the October meeting of our society Mrs. W. C. Moore resigned her office as president. Mrs. U. G. Poland was elected to fill the vacancy. At this meeting the office of secretary-treasurer was changed into two separate offices by a vote of the society. Miss Lola Jackson was elected as treasurer, and Mrs. O. E. Spurgeon was elected as secretary. A committee which had been appointed by the president to draft a constitution and by-laws for our auxiliary made its report. The proposed constitution and by-laws as submitted by this committee were adopted as read.

Two social and six business meetings of the Auxiliary were held during the past year.

At some of our meetings we folded paper napkins for the use of the Visiting Nurses' Association. Our Auxiliary furnished milk for two months to the undernourished children of one of the schools in our city.

There are fifty-three members in the Auxiliary. Fifty-three dollars were collected as dues; \$26.50 was sent to the state and national fund.

Election of officers was held at the home of Mrs. R. E. Cole, April 16, 1930. At this time the following officers were elected:

President—Mrs. U. G. Poland.
Vice-president—Mrs. C. M. Mix.
Secretary—Mrs. O. E. Spurgeon.
Treasurer—Miss Lola Jackson.

The social side of our Auxiliary is very much enjoyed and it creates an atmosphere of friendliness and cordiality among the doctors' wives.

We hope to grow and develop into a stronger and more helpful organization during the coming year.

MRS. O. E. SPURGEON,
Secretary.

CORRESPONDENCE

SOUTHERN MEDICAL ASSOCIATION

Jefferson County Medical Society,
Louisville, Ky.,
Sept. 24, 1930.

Editor THE JOURNAL:

The Jefferson County Medical Society, which will be host to the Southern Medical Association during its an-

nual session in Louisville, Ky., November 11th to 14th, 1930, desires cordially to invite you to this event which will be the most outstanding medical convention ever assembled in Louisville.

There are many reasons too numerous to mention why the rank and file of the medical profession in the south and in other states adjacent to Kentucky should be interested in attending this convention. Louisville is looking forward with the keenest interest to the time when it shall open its arms in a hearty greeting to those who shall attend.

Louisville, as well as the State of Kentucky, is rich in scenic beauty, and there are numerous points of historic interest which will have a strong appeal to many who already have signified their interest in the stories about Louisville which have been running in the *Journal of the Southern Medical Association*.

The scientific work of this Association is well known to your editorial staff. There will be on the program of the Louisville session many physicians and surgeons of national and international reputation whose papers and discussions will be of outstanding interest to all in attendance.

We shall very greatly appreciate an editorial comment in your valuable Journal regarding the Louisville session or the publication of this brief notice.

Very respectfully,

EMMET F. HORINE, M.D.,
President Jefferson County
Medical Society.

W. E. GARDNER, M.D.,
Chairman Publicity Committee.

THE GALLSPACH PHENOMENON

Aus der chemischen Abteilung der Deutsche Forschungsanstalt für Psychiatrie (Kaiser Wilhelm Institute) München, Germany.

The name Zeileis, the "wonder doctor of Gallspach" (Austria), is now international. I have recently had an opportunity through the kindness of Herrn Valentin Zeileis and his son, Dr. Fritz Zeileis, to visit the Institute and it may be of interest to communicate some of the mixed feelings with which one leaves Gallspach. In what follows it should be clearly understood that these are simply my own personal impressions, opinions, and observations made during my stay at that place. I have no desire to either attack or defend Zeileis but simply record what I saw and my reactions thereto.

One travels by a wretched train to Grieskirchen and from thence in busses about four miles over a miserable road to Gallspach. It is very much in the nature of a pilgrimage. Zeileis has only an ambulant clinic and after the trip one can readily understand the reason. Certainly no acutely ill patient would ever arrive. This is, of course, an important question in the type of patient he handles, and the trip in itself is not without psychotherapeutic value.

Living quarters are procured from the local townspeople (about 600 inhabitants, as compared with two to three thousand patients), and no hospital of any kind is available. The town is developing with mushroom-like rapidity, but exploitation is not present. The Zeileis Institute is a beautiful new building with every convenience for the patient.

Turning to Zeileis himself before describing the treatment, I found him a simple, sincere person, with an infinite capacity for work and humor. He is not medically trained, but the work of the Institute seems to go on under his direct hand and eye. There are many legends as to how his work and life have developed, all of which are irrelevant. The simple fact seems to be that he is a sincere man with a flare for elementary physics and humanity as he sees it. His son has received a medical education. There are also about six to eight doctors in the institute.

The number of patients treated is incredible, certainly two to three thousand in one morning. The usual course of treatment is three rayings a day for ten days. The

cost is three Austrian schillings per treatment; many are treated free.

The number of orthopedic conditions seems high, of all kinds and descriptions; many tabes. Parkinsons, paralyses, blind and deaf. There were but few children and these severely crippled with various paralyses, deformities and chorea. Curiously enough one is not impressed with the number of neurotics that might be expected to be seen in such an institute. Organic disease certainly is in the vast majority. Mental and most infectious diseases are supposedly not treated. The patients are from all possible classes of society and from all lands—truly a "Tower of Babel" gathering. No distinction is made in their management.

The patients gather in groups of about 400 and strip to the waist. In shifts they are brought into a large darkened room where Zeileis gives the treatment.

First the diagnosis is made by a tube which he holds near the skin of the patient in various parts of the body. According to the way in which this tube lights up the diagnosis is made. The high frequency brush is held in the other hand and one gets the impression that some sort of induction phenomenon in a gas-filled tube produces the light effects. The construction of this diagnostic wand is a secret and constitutes to my mind the weakest part of his work. In combination with the information derived from the wand he adds thereto that derived from a shrewd look at the patient and thus makes a diagnosis in from fifteen to thirty seconds. These diagnoses seem excessively crude and so far as one could guess probably largely wrong. The diagnosis is not, however, an important part of the treatment as all patients, regardless of complaint, are treated alike. One rather wonders why he bothers to make a diagnosis at all.

The diagnosis made, he quickly applies a large brush-like electrode connected with high frequency generators (500,000-600,000 volts) sweeping from the breast over the shoulder and down the back. Occasionally he applies the electrode to the affected area, but this is said not to be essential to the treatment. The electrode is also said to contain radium besides the high frequency current. The current is somewhat of a jolt to most of the patients and there is much momentary screaming, reminding one of a cold shower bathroom. The patient regardless of whether he can hustle or not is hustled into a small booth and given a momentary x-ray exposure. From there the new patients are quickly exposed to a bank of carbon arc lamps which give off a very white light. The carbons of the lamps are supposedly impregnated with helium, why and how seems a puzzle. After this the patient dresses and returns twice more in the day for essentially the same but shorter raying with high frequency current.

I was much impressed with the skill used in handling mass psychology displayed in the institute. Everyone is cheerful, everyone is expected to undress, everyone must move quickly and precisely and no distinction is made to class or nationality. I believe the undressing alone is of immense value for many of these people. It is interesting to see how much more erect they stand once their chests are uncovered—a ready-to-face-the-world attitude.

Zeileis is idolized and damned. That he is not skilled in good so-called conservative medical propaganda is evident. He allows such cheap exhibitions as the *Gallspacher Anzeiger* to be published, containing uncontrolled testimonials, high sounding flub-dub on the scientific basis of his work which in the long run can only do harm to Zeileis. Further, two small brochures are sold in Gallspach purporting to give a true description and explanation of the treatment, written of course by laymen. They are both exceedingly badly done, take a defensive attitude and explain practically nothing.

Wendt and Zeileis presented a paper before the Physiological Congress in Boston (1929) on the influence of unipolar high frequency electric discharges in connection with radium emanations which one had better read for himself to see in how far the treatment rests on a firm, scientific basis.

I had of course no opportunity to see the results of his treatment. There seems to be no real follow-up system. Certainly most people go away highly satisfied and many appear helped. What bad results he has do not appear either in his publications or around his institute. My guess is that the type of patient he handles prevents him from having too many acutely bad results.

That Zeileis is in many respects successful cannot be questioned. He is not a "fly-by-night," and his popularity with the people is on the flow just as it is on the ebb with the medical profession. His so-called "Unspezifisches Reiz-Therapie," namely the supposed stimulation of the mesenchymal cell by a "specific" Zeileis high-frequency-radium-x-ray, does not appeal to me. His psychological management does seem to have many points of usefulness.

E. Stranik, "Das Gallspacher Heilverfahren."

E. Leisner, "Die Zeileis Therapie."

To separate the chaff from the grain might bring reward to the physician. At any rate a sympathetic investigation, if that were possible, would probably lead to a better understanding between the physician and his patient insofar as this and future such vexed problems are concerned.

IRVINE H. PAGE,
Indianapolis.

BOOK REVIEWS

Book received since August 1, 1930:

THE LONG TREK. By Richard L. Sutton, M.D., Sc.D., LL.D., F.R.S. (Edin.) Fellow of the Royal Geographical Society; Professor of Dermatology, University of Kansas. And by Richard L. Sutton, Jr., A.M., B.Sc., M.D., Fellow of the Royal Geographical Society. 347 pages, with more than two hundred illustrations from photographs made by the author. Cloth. Price \$5.00. The C. V. Mosby Company, St. Louis, 1930.

PRINCIPLES AND PRACTICE OF MEDICINE. Originally written by the late Sir William Osler, M.D., F.R.S. Eleventh edition revised by Thomas McCrae, M.D., Fellow of the Royal College of Physicians, London, Professor of Medicine, Jefferson Medical College, Philadelphia. 1237 pages. Cloth. D. Appleton and Company, New York and London, 1930.

PERSONAL AND COMMUNITY HEALTH. By Clair Elsmere Turner, M.A., Dr. P. H., Professor of Biology and Public Health in the Massachusetts Institute of Technology. Third edition. 443 pages. Cloth. Price \$2.75. The C. V. Mosby Company, St. Louis, 1930.

TEXTBOOK OF MASSAGE FOR NURSES AND BEGINNERS. By Maude Rawlins, Instructor of Massage to nurses at St. John's Hospital, Brooklyn, etc. 144 pages. Illustrated. Cloth. Price \$2.00. The C. V. Mosby Company, St. Louis, 1930.

PERNICIOUS ANAEMIA. By Leybourne Stanley Patrick Davidson, B.A., M.D., F.R.C.P.E., and George Lovell Gulland, C.M.G., LL.D., M.D., F.R.C.P.E., with appendix on dietetic treatment by Ruth Pybus, sister dietitian, Royal Infirmary, Edinburgh. Introduction by L. D. Thompson, M.D., assistant Professor of Clinical Medicine, Washington University School of Medicine. 293 pages, with 8 illustrations and 22 plates, 12 in colors. Cloth. Price \$8.50. The C. V. Mosby Company, St. Louis, 1930.

DIETETICS AND NUTRITION. By Maude A. Perry, B.S., formerly director of dietetics at the Michael Reese Hospital Chicago. 332 pages. Cloth. Price \$2.50. C. V. Mosby Company, St. Louis, 1930.

DOCTORS AND SPECIALISTS. A Medical Revue with a Prologue and a Good Many Scenes. By Morris Fishbein, M.D., Editor of the *Journal of the American Medical Association* and of *Hygeia*. With illustrations by Dan Layman. 118 pages. Cloth. Price \$1.00. The Bobbs-Merrill Company, Indianapolis, 1930.

DOCTOR AND PATIENT. By Francis W. Peabody, M.D., Professor of Medicine, Harvard Medical School, etc. 95

pages. Cloth. Price \$1.50. The MacMillan Company, New York, publishers, 1930.

OBSTETRICS. A Textbook for the Use of Students and Practitioners. By J. Whitridge Williams, Professor of Obstetrics, Johns Hopkins University; Obstetrician-in-chief to the Johns Hopkins Hospital, Baltimore. Sixth enlarged and revised edition. 1157 pages with seventeen plates and seven hundred thirty illustrations in the text. Cloth. D. Appleton and Company, publishers, New York and London, 1930.

DISEASES OF THE SKIN. A Textbook for Practitioners and Students. By George Clinton Andrews, A.B., M.D., Associate Professor of Dermatology, College of Physicians and Surgeons, Columbia University; consulting dermatologist and syphilologist to Tarrytown Hospital, etc. 1091 pages with 988 illustrations. Cloth. Price \$12.00. W. B. Saunders Company, Philadelphia, 1930.

GROW THIN ON GOOD FOOD. By Luella E. Axtell, M.D. 344 pages, illustrated and indexed. Cloth. Price \$2.00. Funk and Wagnalls Company, New York.

OUTLINE IN OBSTETRICS FOR NURSES. By F. W. Rice, M.D., Instructor in Obstetrics, Iowa Methodist Hospital, and Broadlawns General Hospital, Des Moines, Iowa. 228 pages, illustrated. Cloth. Price \$2.00. The C. V. Mosby Company, St. Louis, 1930.

SURGICAL CLINICS OF NORTH AMERICA (Southern Number-August, 1930). Issued serially, one number every other month. Volume 10, No. 4, 268 pages with 96 illustrations. Per clinic year (February, 1930, to December, 1930) paper, \$12.00; cloth, \$16.00. W. B. Saunders Company, Philadelphia, 1930.

A TEXTBOOK OF HISTOLOGY. By Harvey Ernest Jordan, A.M., Ph.D., Professor of Histology and Embryology, University of Virginia. 857 pages with five hundred ninety-four illustrations in the text and four plates. Cloth. D. Appleton and Company, New York and London, 1930.

NERVOUS INDIGESTION. By Walter C. Alvarez, M.D., Associate Professor of Medicine, University of Minnesota (The Mayo Foundation). 297 pages. Cloth. Price \$3.75. Paul B. Hoeber, Inc., Publisher, New York, 1930.

THE PHYSICIAN THROUGHOUT THE AGES. Edited by Arthur Selwyn-Brown, B.Sc., assisted by medical specialists. Two volumes, of more than eight hundred pages each. Illustrated. Leather bound. Price \$7.50 per set, obtainable from the Springfield Printing and Binding Company, 279 Dwight St., Springfield, Mass.

Book Reviews:

GONOCOCCAL INFECTION IN THE MALE. By Abr. L. Wolbarst, M.D., urologist and director of urologic clinics, Beth Israel Hospital; consulting urologist, Central State Hospital, etc. Second edition, completely revised and enlarged. Two hundred ninety-seven pages, with one hundred forty illustrations, including seven color plates. Price \$5.50. C. V. Mosby Company, St. Louis, 1930.

The most important new idea incorporated in this second edition of an excellent, concise text book upon a much neglected subject is based upon the author's conviction that gonorrhea must be considered a constitutional disease susceptible of cure only by inherent reparative forces in the individual, acting through the blood stream. For this reason the section on constitutional therapy has been somewhat elaborated. The special chapter on chemotherapy by Mr. McDonagh, in the first edition, has been incorporated in the body of the work of the new edition.

FEEDING AND THE NUTRITIONAL DISORDERS IN INFANCY AND CHILDHOOD. By Julius H. Hess, M.D., Professor and Head of the Department of Pediatrics, University of Illinois College of Medicine; attending pediatrician to Cook County, Michael Reese and Englewood Hospitals, etc. Cloth. 566 pages, illustrated with forty-five engravings and one full-page colored plate. Fifth revised and enlarged edition. Price, \$4.50. F. A. Davis Company, Publishers, Philadelphia.

In this edition much new matter has been added to the chapters on artificial feeding, rickets, scurvy, spasmophilia, acidosis and anemias of infancy; celiac disease has been added to a chapter and revisions made in the subjects of acidified milks, vomiting, colic and flatulency, constipation and abnormal stools. In all, the book presents a thoroughly practical treatment of the subject matter covered and will afford an excellent working manual for both pediatrician and general practitioner in its particular field of usefulness. The timely use of italics for the emphasis of the more epigrammatic points made acts to conserve the time of the reader and to afford a more ready means of quick reference.

Because of its intensely practical character, as well as its wealth of condensed information thoroughly modernized, the book should find a ready and broad market.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

The following products have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in New and Non-official Remedies:

AMPULES EMULSION MESUROL, 20 PERCENT, 1 CC.—A suspension of mesurol (New and Nonofficial Remedies, 1930, p. 100) in sesame oil, each cubic centimeter of which contains mesurol equivalent to from 0.103 to 0.117 Gm. of bismuth. Winthrop Chemical Co., Inc., New York.

TABLETS THEOCIN 1½ GRAINS.—Each tablet contains theocin (New and Nonofficial Remedies, 1930, p. 415) 1½ grains. Winthrop Chemical Co., Inc., New York.

AMPULES MERCUROCHROME-H. W. & D., 1%, 10 CC.—An aqueous 1 per cent solution of mercurochrome-220 soluble (New and Nonofficial Remedies, 1930, p. 271) stabilized with ammonium hydroxide; in 10 cc. ampules. G. D. Searle & Co., Inc., Chicago.

AMPULES MERCUROCHROME-H. W. & D., 1%, 20 CC.—An aqueous 1 per cent solution of mercurochrome-220 soluble (New and Nonofficial Remedies, 1930, p. 271) stabilized with ammonium hydroxide; in 20 cc. ampules. G. D. Searle & Co., Inc., Chicago. (*Jour. A. M. A.*, August 2, 1930, p. 343.)

DIPHTHERIA TOXOID-CUTTER.—Diphtheria Toxoid-Cutter (New and Nonofficial Remedies, 1930, p. 485) is also marketed in packages of one 45 cc. vial. Cutter Laboratory, Berkeley, Calif.

SYNTHETIC THYROXINE.—It contains not less than 65 per cent of iodine. It has the actions and uses of thyroxin, U.S.P. (New and Nonofficial Remedies, 1930, p. 403). Synthetic thyroxine is supplied in the form of ampules containing 1.1 cc. of solution containing 1 mg., and in the form of a solution, each cc. containing 2 mg., and in tablets containing 1 mg. Hoffmann-La Roche, Inc., Nutley, N. J. (*Jour. A. M. A.*, August 16, 1930, p. 485.)

ANTIMENINGOCOCCIC SERUM.—Antimeningococcic serum (New and Nonofficial Remedies, 1930, p. 350) marketed in packages of two 15 cc. syringes with apparatus for intraspinal injection; in packages of one 50 cc. double-ended vial with apparatus for intraspinal injection. National Drug Co., Philadelphia.

MERCUROCHROME SUPPOSITORY-ACES.—Suppositories representing a 2 per cent solution of mercurochrome-220 soluble (New and Nonofficial Remedies, 1930, p. 271) in a slightly aromatized, hydroglycero-gelatin base; each suppository weighs approximately 6.5 Gm. (100 grains). Aces Laboratory, Inc., Brooklyn, N. Y. (*Jour. A. M. A.*, August 23, 1930, p. 594.)

WHITE'S COD LIVER OIL CONCENTRATE.—A cod liver oil concentrate in the form of tablets (wafers), each containing not less than 250 vitamin A units and not less than 100 vitamin D units. White's cod liver oil concentrate possesses properties similar to those of cod liver oil

so far as these depend on the fat soluble vitamin content of the latter. White Laboratories, Inc., Gloucester, Mass. (*Jour. A. M. A.*, August 30, 1930, p. 663.)

FOODS

The following products have been accepted by the Committee on Foods of the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in Accepted Foods:

HEINZ RICE FLAKES PREPARED WITH PURE RICE CULLULOSE (H. J. Heinz Co., Pittsburgh).—A flaked rice containing added rice cellulose, yeast, salt and milk sugar. Milled rice, rice cellulose (7 per cent of weight of rice), yeast (7 per cent), table salt (2.75 per cent), and milk sugar (0.5 per cent) are cooked, dried, flaked, toasted, cooled and packed. The product is a breakfast cereal containing indigestible cellulose that is claimed to be less irritant than wheat bran. It is proposed for use in an anticonstipative diet.

RY-KRISP (Ralston Purina Co., St. Louis).—A whole rye grain wafer flavored with salt. Ry-Krisp may be used in cases of wheat allergy. The wafers encourage thorough chewing.

MERRELL-SOULE POWDERED SKIM MILK (The Borden Co., New York).—A standard, uniform, practically fat free, powdered skim milk. It contains fat 1.0 per cent, protein 36.5 per cent, lactose 51.8 per cent, mineral matter 7.9 per cent, moisture 2.5 per cent. The product is offered as a near approach to a fat-free milk.

CURTICE BROTHERS CERTIFIED NURSERY FOODS (Curtice Bros. Co., Rochester, N. Y.).—Sieved spinach, carrots and tomato, and vegetable puree. The water content approximates that of the raw vegetables. These foods are stated by the manufacturer to be especially prepared for babies and young children. The manufacturer guarantees a declared minimum number of units of vitamins A, B and C. This information is declared on the label of the cans.

ALP ROSE CANNED FOODS (John Sexton & Co., Chicago).—These are canned fruits and vegetables, packed in water without added sugar or salt, and intended for use in restricted diets. The label declares the average composition for available carbohydrates, protein and fat.

VAN CAMP'S PUREED FRUITS AND VEGETABLES (Van Camp Packing Co., Indianapolis).—These include purees of peas, spinach, tomatoes, prunes, apricots, carrots with pureed tomatoes and beef broth, and mixed vegetables with beef broth. These foods are designed by the manufacturer to influence the greater use of certain vegetables of good nutritional value. They are intended to provide them in smooth diet form and are chosen for their vitamin values. (*Jour. A. M. A.*, August 16, 1930, p. 485.)

SUN WHEAT BISCUITS (Canada Biscuit Co. Ltd., London, Ont.).—A wheat biscuit with unusual vitamin and calcium content.

SUNWHEATS (The Sawyer Biscuit Co., Chicago).—Sunwheats is the brand name for Sun Wheat Biscuits manufactured for distribution in the United States.

HORLICK'S MALTED MILK (Horlick's Malted Milk Corporation, Racine, Wis.).—The product is a dried milk and extract of malted barley and wheat. Horlick's Malted Milk is claimed to be a nutritious food and when taken hot before retiring to be helpful for inducing sleep, and to be valuable in diets for undernourished, nervous patients, those afflicted with wasting diseases, invalids and convalescents.

HORLICK'S SWEET CHOCOLATE FLAVOR MALTED MILK (Horlick's Malted Milk Corporation, Racine, Wis.).—The product is Horlick's Malted Milk flavored with cocoa. Its composition is essentially that of Horlick's Malted Milk.

GRAPE-NUTS (General Foods Corporation, New York; Postum Co., Inc., Battle Creek, Mich.).—A breakfast cereal of whole wheat and malted barley. The manufacturer offers Grape-Nuts as an energy food providing proteins, the mineral elements of wheat and barley, and vitamin B. (*Jour. A. M. A.*, August 23, 1930, p. 595.)

ACCEPTED DEVICES FOR PHYSICAL THERAPY

The following have been accepted by the Council on Physical Therapy of the American Medical Association for inclusion in its list of accepted devices for physical therapy:

AUSTIN'S IRRIGATORS.—Austin's Irrigators (W. D. Peattie, Inc., Cleveland, Ohio) are designed for "dilating the sphincter muscles" and "for continuous irrigations", particularly in "the use of extreme temperatures in (irrigating) liquids." It is claimed for the apparatus (1) that complete dilation and thorough cleansing is accomplished; (2) that the vaginal types permit long, uninterrupted douching; (3) that the rectal types permit long, uninterrupted irrigation; (4) that they are made of material which permits the use of irrigating liquids of high or low temperature; (5) that the apparatus may be taken apart and sterilized thoroughly; (6) that it is easily tolerated by the patient; (7) that any soluble antiseptic may be used; and (8) that the irrigators or tips can be made a part of any irrigating apparatus. The Council on Physical Therapy believes that these claims are reasonable and not unwarranted.—(*Jour. A. M. A.*, August 2, 1930, p. 343.)

SORENSEN THERAPEUTIC INHALER No. 922.—The Sorensen Therapeutic Inhaler No. 922 (C. M. Sorensen Co., Inc., Long Island City, New York) is stated to be an electrical instrument giving warm, dry air for the vaporization of inhalants. The device is constructed to heat air in sufficient volume to permit of deep and continued breathing direct from the applicators, thus providing the mucosa with a continuous supply of warm air or of warm medicated vapor. It is designed to operate on a 100 to 125 volts, alternating or direct current, and its power consumption is less than 15 watts.

SORENSEN THERAPEUTIC HEATER No. 921.—The Sorensen Therapeutic Heater No. 921 (C. M. Sorensen Co., Inc., Long Island City, New York) is similar to the Sorensen Therapeutic Inhaler. It is different in that the cold air, instead of being drawn through a heating chamber, is forced through by some type of air compressor. It is claimed to be of value in the treatment of those diseases of the middle ear where the application of warm dry air, or warm medicated vapor, is indicated.—(*Jour. A. M. A.*, August 9, 1930, p. 413.)

SUNLIT ULTRAVIOLET GLASS.—The window glass known as "Sunlit" (Semon, Bache & Co., New York) is stated to be a glass that transmits the biologic ultraviolet rays of the sun. According to a test conducted by the Bureau of Standards this glass does transmit an appreciable percentage of the solar rays which have been shown to have antirachitic properties.—(*Jour. A. M. A.*, August 16, 1930, p. 484.)

PROPAGANDA FOR REFORM

ATROPHY OF THE LIVER DUE TO CINCHOPHEN PREPARATIONS.—When cinchophen was introduced into therapeutics (reinforced by the trade name "Atophan"—the tophi remover) its striking effect on the elimination of uric acid captured the clinical imagination. It was seen, however, that Atophan belied its name for the tophi refused to be removed. The drug was found, however, to be an effective analgesic. Various esters and derivatives were advertised extensively for the benefit of those who do not like the flavor of cinchophen and for the benefit of the manufacturers who could establish a monopoly on each little change. Cinchophen became a household remedy in the belief that it could do no harm. In 1923 evidence became available that the drug was causing fatal hepatitis. Since there are many other analgesics about as effective as cinchophen in many cases, and without this insidious danger, the use of the drug should be avoided whenever possible. Unfortunately, this is not simple, for a physician may be led easily into prescribing cinchophen when he does not know it. He may avoid it under the official names of cinchophen and neocinchophen or the original, therapeutically misinforming names of Atophan and Novatophan, but can he be expected to keep

in mind all the noninforming names which manufacturers invent? This illustrates the importance of the rule of the Council on Pharmacy and Chemistry which permits not more than one trade name—that applied by the discoverer. The rule protects those that use New and Non-official Remedies, but can do little for others. The case is even worse for the patent medicines that are advertised to the public. While physicians, now that they have been warned, will restrict the use of cinchophen and watch for the first signs of danger, cinchophen preparations may be sold to the public in mixtures of secret composition.—(*Jour. A. M. A.*, August 2, 1930, p. 345.)

SYNTHETIC THYROXINE.—The A. M. A. Chemical Laboratory recalls that Kendall isolated thyroxine from the thyroid gland and that he considered it to have a constitution which later was found to require revision and that in the U. S. Pharmacopeia thyroxine is defined as an active principle obtained from the thyroid gland. Attention is called to the fact that while spelled in the Pharmacopeia without a final "e" the substance is basic in character and must be spelled thyroxine. Three years ago, Harington and his coworkers arrived at the conclusion that the Kendall formula was not correct. Later this conclusion was confirmed by the preparation of thyroxine synthetically. Synthetic thyroxine has been prepared by pharmaceutical laboratories abroad and one brand, Synthetic Thyroxine-Roche, has been submitted to the Council on Pharmacy and Chemistry. The Laboratory found this brand to comply with the standards which it had elaborated and the Council admitted this product to New and Nonofficial Remedies for the reason that the pharmacopeial definition does not apply to the synthetic substance.—(*Jour. A. M. A.*, August 16, 1930, p. 484.)

SULPHOCOL AND SULPHOCOL SOL NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that Sulphocol is the proprietary name applied by the American Chemical Laboratories to a product claimed to be colloidal sulphur, containing twenty to twenty-five percent of elemental sulphur, and that Sulphocol Sol is stated to be a ten-percent solution of Sulphocol. The Council found Sulphocol unacceptable for New and Nonofficial Remedies because the therapeutic claims are unwarranted, because its composition was not in accord with the claims made, and because the evidence does not show that the product is of sufficient originality to permit the recognition of a proprietary name. In publishing its report of rejection, the Council explains that the American Chemical Laboratories have revised its claim of composition in accordance with the findings of the A. M. A. Chemical Laboratory and offered to delete one of the therapeutic claims objected to, but offered no evidence which permitted a revision of the Council's report in other respects.—(*Jour. A. M. A.*, August 23, 1930, p. 594.)

THE RECTOR COMPANY DECLARED A FRAUD.—The Rector Company, A. J. Major president, and the J-L Manufacturing Company, Alexander City, Missouri, were called on by the postal authorities last April to show cause why a fraud order should not be issued against them. According to the Solicitor of the Post Office Department, the Rector Company's business consists in selling through the mails a preparation claimed to cure pyorrhea, including a liquid called "Pyro-Kil" (formerly called "Pyro-Nox"), said to be composed of compound solution of cresol, U. S. P., glycerin and water, flavored with oils of clove and wintergreen. The evidence considered by the Solicitor brought out that the product, Pyro-Kil, was manufactured and sold to the trade by the J-L Manufacturing Company, while the mail-order part of the business was carried on under the trade name of the Rector Company, both operating from the same address. The Postmaster-General notified the local postmasters to stamp all mail that came addressed to the Rector Company, A. J. Major president, and the J-L Manufacturing Company, fraudulent, and return it wherever possible to the senders.—(*Jour. A. M. A.*, August 23, 1930, p. 612.)

(Continued on Page xx)

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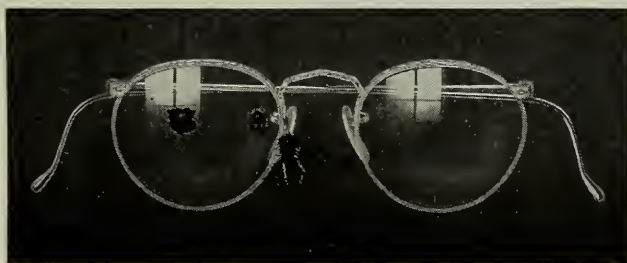
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TRUTH ABOUT MEDICINES

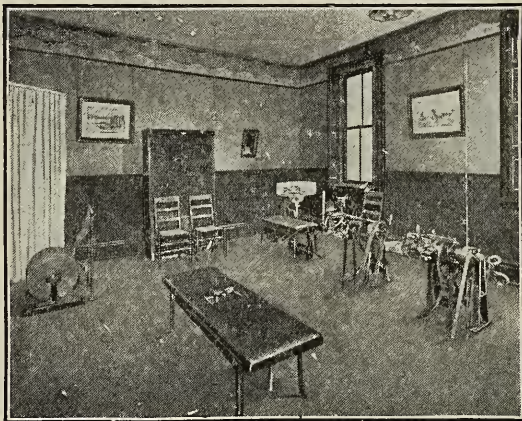
(Continued from page 516)

THE VREELANDS QUACKERY AGAIN.—Recently the *Jour. A. M. A.* published an article, "The Vreelands Quackery," regarding a fraudulent grow-hair-quick concern run by one Clayt Vreeland, of Cleveland, Ohio. In this article it was brought out that among the testimonials used was one from a physician, Dr. C. J. Cannon. Doctor Cannon believes that the reference to his testimonial did him an injustice because it was used without his consent. The fact remains that he gave the testimonial and further that he should have been aware of its use. In 1928 a layman wrote to Doctor Cannon stating that he had read the data received from Vreeland and saw his letter there. The layman asked for the reasons why he considered the preparation good and Doctor Cannon replied that he considered the people honest and reliable and suggested that he call at their office for examination and advice.—(*Jour. A. M. A.*, August 23, 1930, p. 613.)

THE TESTIMONIAL INDUSTRY.—Two or three years ago certain members of the medical profession were asked to answer a question that they were wholly incompetent to answer. The question was whether, in their judgment, the "toasting" process alleged to be applied to the tobacco in "Lucky Strike Cigarettes" was likely to free the cigarettes from irritation to the throat. In addition to the questionnaire, the doctors received a carton of 100 cigarettes. The Lucky Strike people now claim that over 18,000 physicians answered the question given in the affirmative. Today physicians in the south and possibly other sections of the country are being circularized by the concern which exploits "Ironized Yeast". "Ironized Yeast" belongs to the get-plump-quick class of nostrums. It is a mixture of yeast and iron. It also contains phenolphthalein. The circular letter that the Ironized Yeast Company is sending out to physicians starts out with this

rather crude offer: "A gift worth ten dollars for you for just a little information." The physicians are then asked to answer two questions, the answers evidently to be used in the exploitation of Ironized Yeast. For the answers written on his own stationery the physician is offered "a luxurious flacon of exquisite French perfume—*Tout Paris de Guimet*, regularly sold at \$10." Will the medical profession bite?—(*Jour. A. M. A.*, August 30, 1930, p. 679.)

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the Food, Drug and Insecticide Administration of the United States Department of Agriculture, which enforces the Federal Food and Drugs Act: Knox Cold Tablets (L. J. Barnet Company), consisting essentially of acetanilide, quinine salt, with some powdered crude drugs, including a laxative, resins, traces of aloin, red pepper and some mydriatic alkaloids. Nu-Remedy (The Central Laboratories, Inc.), each tablet containing 1.4 grains of phenacetine and nearly two and one-half grains of aspirin. Bu-Ku-Jin Elixir (The Tonkin Distributing Company), consisting essentially of alcohol, sugar and water, with traces of flavoring oils and some plant drug extractives, including buchu. R. P. Liniment (The Alveo Chemical Company, Inc.), consisting essentially of volatile oil (ninety-seven percent), including oil of pine. Nue-Ovo (Research Laboratories, Inc.), consisting of a dark brown watery solution of extracts of plant drugs including a laxative drug, a bitter drug, resin, saponin and caffeine, colored with caramel and preserved with sodium benzoate. Pneumatica (The Charles F. Polk Company), consisting essentially of petrolatum including red pepper, oil of wintergreen, carbolic acid, camphor and some mydriatic alkaloids. Hi-Grade Kold Breakers (The Continental Drug Company), containing essentially one grain of acetanilide to each tablet, red pepper, extracts of laxative plant drugs including podophyllin, a small amount of iron salts and sulphates.—(*Jour. A. M. A.*, August 30, 1930, p. 680.)



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ORIGINAL ARTICLES

SURGICAL PROCEDURES FOR LESIONS OF THE COLON*

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Any surgical maneuver by which one attacks or extirpates a segment of, or the entire, large bowel, bearing a neoplasm or other organic lesion, be it inflammatory such as diverticulitis, or congenital such as megacolon, is but a step in the sequence of events aimed at eradication of the lesion. A necessary, and, albeit, the most important event in the chain, operation must be supplemented by many auxiliaries, both before and after its accomplishment, to insure maximal success. The majority of operations on the colon are aimed at extirpation of malignant growths or treatment of inflammatory lesions, such as diverticulitis or intractable ulcerative colitis. Recently light has been shed on megacolon and other congenital organic lesions of the large bowel by ramisection of the lumbar sympathetic nerves, or division of the ileocolic nerves singly. Since most procedures necessarily are aimed at malignant conditions or diverticulitis, it is with these two diagnoses in mind that operative procedures usually are formulated.

Factors of safety in operating on the large bowel are, in order of importance, I believe: (1) adequate preoperative rehabilitation, combined with the necessary decompression; (2) selection of the optimal time for operation and selection of the operation for the patient, rather than an attempt to standardize procedures and to fit all cases of carcinoma or diverticulitis to one or two types of maneuver; (3) employment of intraperitoneal vaccination with colon bacilli and streptococci, as a routine, in an effort to immunize against peritonitis which is the most common cause of death; (4) employment, in a large number of cases, of operations in multiple stages; (5) selection of spinal anesthesia as a routine, except for definite contra-indication, and (6) rigid adherence to a standardized postoperative regimen. The two most important preoperative factors, around which revolves, in large measure, the immediate success of segmental resection for a malignant growth,

are adequate measures of rehabilitation and decompression of the colon. It should be remembered that, with the exception of a small group of cases in which patients come into the hospital with acute obstruction, neoplasms of the colon almost invariably represent chronic ailments, presenting symptoms of long duration, and one is not only justified in employing preoperative measures which take time to accomplish, but is compelled to do so.

That preoperative treatment is best accomplished by individualization of patients through a scheme of hospitalization has been the experience of my colleagues and me. Although this may work economic hardship on some patients, unquestionably the period of five days, seven days, or longer, which is devoted to preparation of the patient, both from the standpoint of general health and of reduction of infection and obstruction around the local growth, is decidedly advantageous. It is possible that some plan of ambulatory treatment which would be just as satisfactory may be worked out, but up to the present time our idea has been to hospitalize this entire group of patients with colonic and rectal surgical lesions for a sufficiently long period before operation to make sure that they are rehabilitated and relieved of their obstruction. Rectal irrigations twice a day, with warm saline solution, supplemented by mild purgations, usually with senna, have been our preferred methods. We have also used a diet high in calories and low in residue, which consists, in the main, of fruit juices, butter, rice, gelatin, cream, eggs and candy. The twenty-percent fruit juices, poured from canned fruit, and crystallized fruit, are tolerated satisfactorily, and large quantities of orange juice and other fluids are insisted on. With this type of diet and a constant effort at reduction of intracolonic pressure, blood transfusions, and other supportive measures which seem indicated, we feel that the condition may be improved greatly in a high percentage of cases. In the left side of the colon particularly, local irrigations not only reduce the obstruction but reduce the infection around the growth. These effects are highly desirable since peritonitis is the most common cause of death. By using intraperitoneally, vaccine against the streptococcus and the colon bacillus, prepared from patients who have succumbed to peritonitis, we feel that we have been

*Presented before the Indiana State Medical Association, Fort Wayne, September, 1930.

able to increase the number of satisfactory end-results. Vaccine is given as a routine three days prior to resection. This is a theoretically correct procedure, which undoubtedly is one of the most important stages of the preoperative management.

One other consideration of significance is the choice of method of anesthesia, but I hesitate to offer any arbitrary opinion because of the constantly changing ideas concerning anesthesia, and because of the well-established belief that the method of anesthesia which I use in these cases, namely, spinal, is accompanied by a higher operative risk than the usual method of inhalation. In spite of the increased risk, there are certain advantages which accrue to the use of spinal anesthesia which more than counterbalance the immediate risk of its administration. Spinal anesthesia should never be administered by anyone other than an expert anesthetist, and he, during the operation and subsequent to it, should maintain a watchful eye on the patient for evidences of falling blood pressure or other undesirable complications. In the event that the spinal anesthesia is given properly and supervised, the danger incident to its employment is reduced to a minimum and, in my experience of the last three years in using it routinely in colon cases, there have been no untoward immediate effects. The ease and comfort of operating is enhanced greatly by the use of spinal anesthesia, but the most important feature, I believe, is the fact that the abdomen is quiet for thirty-six or forty-eight hours subsequent to operation, which results in lowering the opportunities for peritoneal contamination.

The choice of operation in the two halves of the colon differs materially because of the different type of growth found in the right and the left segments, respectively. The predisposition of the right half of the colon to harbor neoplasms which produce marked anemia and intoxication without obstruction, and the obstructive phenomena of the left half of the colon, which demand intervention, sometimes with graded maneuvers, or certainly with preoperative measures which aim at decompression, necessitates employment of different procedures.

In the right half of the colon, it is my feeling that end-to-side aseptic ileocolostomy between the terminal portion of the ileum and the middle of the transverse colon, followed by resection of the right segment at the same stage or subsequently, are the procedures of choice. I emphasize the necessity of employing the end-to-side anastomosis and of making an aseptic juncture because I am convinced that lateral anastomosis does not accomplish nearly so much in reduction of local infection around the growth. When the first stage of the operation has been completed by division of the small bowel and juncture of its loop with the colon, the second stage is a much simpler one, and consists only of mobilization, resection, and turning in the cut end of the colon. The advantages of an aseptic maneuver are self-evident.

Certainly, any procedure which minimizes the chances of infection is desirable, and although the so-called aseptic maneuver may not always be absolutely aseptic, because of puncture of the thin wall of the colon by the needle in making the union, it certainly cuts down the infection.

When the union, end-to-side, has been made over the clamp and this step has been completed, the question as to whether it is desirable to remove the right half of the bowel at this stage or at a subsequent stage is one that must be decided by the surgeon in each case on its merits. I have gone through several stages of experience in resection of the colon in which I have ranged from complete resection and anastomosis, with decompression by ileostomy in the terminal portion of the ileum, to a routine of ileocolostomy and subsequent resection in two stages. With increasing experience, I am convinced that there is a middle ground which one may safely occupy, and that, for very definite indications, one may resect in one stage, with or without decompression, in approximately half of the cases, provided the preliminary preparation has been carried out adequately and rehabilitation and decompression have been accomplished satisfactorily. I should reserve for the one-stage operation the cases in which there is not marked anemia or in which the anemia, if present on admission, has been combated successfully by blood transfusions and supportive measures. In addition, I should classify in this group the patients who constitute sturdier risks, who have mobile growths, provided surgical judgment seems to indicate that general resistance is sufficient and that the patient can stand a rather formidable procedure. In the event that a decision is made to carry through a one-stage procedure, frequently it is satisfactory to supplement this by decompression by means of ileostomy, by the maneuver popularized by C. H. Mayo, of turning in the end of the colon with a catgut suture which is left long and brought up into the wound, through the peritoneum, and left hanging out so that in case of urgent tension from gas, unrelieved by enemas, one may, on the fourth or fifth day, spear down along the suture and bore a hole into the end of the bowel. In the event that one chooses to do a maneuver in two stages, the accomplishment of aseptic anastomosis and the abandonment of the operation at this point again is satisfactory, and the second stage may be accomplished with more ease and confidence after a sufficient period of waiting has elapsed.

Let me urge that the amount of time between stages be considerable. It has been borne in on me, by unhappy experience in a number of cases, that the desire to accomplish a completed operation in as short a time as possible is frequently a disadvantage. It is reasonable to think that if there is need of a graded procedure, the interval between the two stages should be comparatively long in order that the patient may not only recover from the effects of the primary operation

but also that he may reap the benefits of it by sufficient time being allowed to elapse for him to return as nearly as possible to a state of physiologic equilibrium. The economic situation urges that the interval of time be short, but economics and carcinoma mix poorly and surgical judgment should not be impeded by the urgent desire to complete a task at the questionable risk of not permitting a sufficient interval to elapse.

In the graded maneuver, at the second stage there is small reason for exploration to be carried out again. This exploration should be carried out carefully in a routine manner immediately after the abdomen is opened at the primary operation; the viscus containing the growth should be the last organ to be palpated. The order of exploration should be: (1) the liver, (2) the aortic lymph nodes, (3) the nodes at the bifurcation of the mesenteric vessels, (4) the pelvis, and (5) the growth and its adjacent lymphatics. The growth should be manipulated mildly and gently. It is frequently host to myriads of virulent organisms which penetrate its coats in the presence of ulceration and obstruction, as has been demonstrated by Hermann and others. To palpate it first and to be sure of the presence or absence of fixation, from the point of view of resectability, is not infrequently to spread contamination in the peritoneal cavity as the exploration is completed. At the second stage of the operation, should it be deemed wise to do the operation in two stages, subsequent exploration is unnecessary, and with the local field of operation packed off, rarely should there be contamination. It has been my experience that mortality from growths of the right half of the colon is largely a matter of the first stage of the procedure, provided, of course, one does not hurry into the resection subsequently. I believe that recession of infection around the growth, as well as the increased resistance of the patient following the first stage, is the reason why the second stage is the safer of the two.

In the left half of the colon, where obstruction is so frequently the first and most alarming symptom, one is confronted with a different problem and, indeed, with a different type of bowel on which operation is to be carried out. In the first place, there are two groups of obstruction to which I wish particularly to call attention. The problems of each are different and the immediate mortality and end-results are influenced vitally by the type of obstruction present. There is a small group of cases, comprising about five percent of the whole, in which obstruction comes on out of a clear sky, acutely, without previous intimation of trouble in the gastro-intestinal tract. This group of cases is a particularly hazardous one to deal with since the superimposing of an acute obstructive lesion on a chronic neoplasm increases hugely the chances of fatal outcome. If acute intestinal obstruction is diagnosed in adult patients and if one can decide, by any means, laboratory or clinical, that the obstruction is in the large bowel, and at the

same time can exclude strangulated hernia and intussusception, the chances are ninety out of a hundred that the obstruction is due to carcinoma of the left half of the colon.

Here the type of operation demanded is not aimed at extirpation of the growth and cure of the patient, but the primary consideration is relief of the acute condition. This, I believe, is best accomplished by blind cecostomy done under spinal or local anesthesia, without any attempt to explore the abdomen or to localize the growth to any segment of the large bowel. When a cecostomy has been done and the patient has been relieved of the immediately urgent symptoms, after a sufficient length of time has elapsed, one may with confidence begin, by whatever means are at one's disposal, to make an accurate diagnosis and localize the lesion. If the presence of carcinoma of the colon is proved, the preliminary step of the operation already has been accomplished, and resection and anastomosis can be carried out at the second stage, provided distant metastasis has not taken place. In the clinic, I have had a small group of this type of cases in which, after blind cecostomy had been done, the patient recovered sufficiently to be examined satisfactorily and the growth was found to be in the left portion of the colon or the rectosigmoid. When it was in a mobile segment of the colon, accessible to resection, I have done resection as a second stage of the operation, with aseptic anastomosis over my clamp, satisfactorily and confidently because of the decompressing cecostomy which was proximal to the line of union.

For the most part, the remainder of the growths of the left half of the colon, exclusive of this acute group, all present a certain amount of obstruction. This is reasonable to expect because of (1) the nature of the tumor itself, which usually is encircling and has a tendency to cause progressing stenosis of the bowel; (2) the fecal content of this side of the large bowel is hardened and formed, and (3) the lumen of the bowel normally has a heavier musculature and a smaller diameter than its fellow of the right side. With these factors in mind, it is recognized readily that obstruction, either mild or considerable, but still reasonably called chronic, would be present in most of these cases. One frequently notices, even after marked effort at decompression by enemas, or even if a drainage operation has been carried out, that the colon in the vicinity of the growth is thick-walled, edematous and somewhat dilated. Because of this type of obstruction, I never operate on a colon, unless it is shut off acutely, without adequate preliminary preparation to reduce this factor. By repeated enemas, by mild and judicious purgation and institution of the residue-free dietary regimen already referred to, it is possible in more than ninety percent of the cases to reduce the obstruction to such a point that resection is feasible at the time of exploration. There is a surgical axiom that any viscus, to be resected

successfully, must be mobile or mobilizable, and this fortunately applies to all segments of the colon beyond the hepatic flexure, down to a point where the middle third of the sigmoid joins the lower segment.

By recalling the embryologic development of the large bowel one readily sees how mobilization may be carried out most satisfactorily. In the embryo, the colon is a pelvic organ and ascends, bending to the left and up, on to the region of the splenic flexure, then directs its course over toward the liver, at which point it arrives at about the third month. Subsequently, it descends into the right iliac fossa. During the progress over this circuitous route, it revolves around the superior mesenteric vessels as an axis and becomes attached along the lateral abdominal parietes by fusion of the peritoneum of its outer layer with the lateral parietal peritoneum. From this circumstance, the blood vessels are entirely mesial along the whole course of the large bowel and one may divide the outer leaflet of the mesentery freely and without fear of hemorrhage. By dividing this leaflet, a space is reached in which the blood vessels cross and in which there are fat and lymph nodes, and by mobilizing the entire organ mesially, radical resection may be accomplished, with the blood supply, which is the essential portion, entirely under view.

Mobilization of the splenic flexure is more difficult because it is frequently high-lying, but the splenocolic ligament is bloodless, can be divided without difficulty, and the colon can be drawn down into the wound without traction on surrounding structures. The splenic flexure, fortunately, has a scanty lymphatic supply and although obstruction is present in this region in practically one hundred percent of cases in which it is involved, long-standing growths which are removable give good prognosis, because, although they are prone to penetration and perforation, they do not metastasize because of the poor lymphatic drainage.

The operation of choice in any mobile segment of the colon, in our experience, lies between two maneuvers and the choice between these is made entirely on the basis of the amount of obstruction present, granted that the case constitutes the average good risk. My first choice is obstructive resection, which I have done in a large series of cases, with very satisfactory immediate and ultimate end-results. The second choice is decompression, such as cecostomy and colostomy, and subsequent resection with anastomosis. Undoubtedly one rarely should do primary resection and anastomosis in the left half of the colon, but if it is done in an exceptional case, it is my opinion that cecostomy always should accompany it for decompression and safety.

Obstructive resection, as I have outlined it, is a graded procedure, but in more than half of the cases is accomplished in a single stage, as I shall point out. It employs the fundamental advantage

of the old Mikulicz exteriorization procedure without being a victim to its weaknesses. That is, the Mikulicz operation was a local excision of the growth, without removal of the gland-bearing regions in immediate juxtaposition to it. The old Mikulicz operation carries a high mortality rate, as I have shown in a previous report. The growth was prone to recur in the abdominal wall because one might implant a carcinoma in a cut surface, and in twelve percent this undesirable sequela was noted. To avoid this, I have long practiced decompression by every possible method in order to insure a flat colon when the operation is undertaken. Given a small amount of obstruction, or no obstruction, I unhesitatingly employ obstructive resection because I am able to mobilize the growth, and to take out all the mesentery necessary, and the nodes on both sides of the growth. A clamp, which was designed for aseptic anastomosis, is left on the ends of the bowel, the raw surfaces are peritonized, and a tongue of peritoneum is brought from the anterior abdominal wound, under the clamp, between the two limbs of bowel and is snugged around the bowel on both sides, leaving the wound tight. This makes a resection in one stage and leaves the bowel completely obstructed. The employment of spinal anesthesia and abstinence from food and drink by mouth permits one to leave this clamp tightly closed for sixty to seventy-two hours without deleterious effects. Indeed, nausea, much less vomiting, rarely accompanies this maneuver up to sixty hours. At the end of that time, if intracolonic pressure is evidenced by distention, nausea and discomfort, the proximal blade of the clamp is loosened, letting the clamp lie *in situ*, and the pressure from the accumulation of gas in the colon blows out the end and relieves the tension. The clamp is left on, to drop off as the distal end becomes necrotic and sloughs away; usually this is accomplished about the seventh or eighth day. This leaves the two "gun barrels" in the wound, like the old type Mikulicz procedure, and at the end of about two weeks, by the agency of an enterotome, or usually two curved clamps, the spur slowly is necrosed through. If there is no eversion of mucosa, and if the bowel is well down in the wound, closure takes place spontaneously in more than half of the cases without a separate procedure being necessary. A most satisfactory and unusual observation that we have made is that there is rarely infection in these wounds, and almost invariably they have closed by primary union around the surfaces of bowel. It is my practice, at the end of three to four weeks, after the spur has been cut out by the enterotome, to permit the patient to go home, and if healing does not take place spontaneously in two months, so that the alvine discharges pass by the natural route, to have him return for closure, which is accomplished in the usual manner of closure of colostomy. Should it be deemed not feasible to attempt obstructive resection, decompression by means of colostomy in

the transverse colon or at some point proximal to the growth, and subsequent resection and anastomosis is a satisfactory method.

Mortality following operations on the large bowel is necessarily high because most of the patients either require palliation from a carcinoma, and any type of operation which is palliative in this field carries a high mortality with it, or they require resection for a lesion which primarily is infected hugely and consequently presents opportunities for peritoneal contamination. Moreover, there are no conditions of the colon which come to operation which are comparable in risk to the simpler, chronic cases of surgical diseases of the uterus, stomach, breast, and other such types of chronic disease for which surgery is required. There are no cases, in other words, with which to "dilute" the results of resection for carcinoma and diverticulitis. But if the results in carcinoma of the colon which is amenable to resection is compared with that in resectable gastric carcinoma, the discrepancy in the death rates will be very small. In the last three years, on the colonic service at The Mayo Clinic, following the standardized preoperative routine and postoperative care, we have had an increasingly satisfactory reduction in the death rate in the hospital, with a promise, I think, of more satisfactory end-results, because of the more radical type of work which has been accomplished. The mortality rate by operation in a group of 755 patients who were submitted to operation for all types of colonic lesions, largely carcinoma, was 8.6 percent. This is a satisfactory mortality rate, I think, particularly if it is recognized that the proportion of operability in this group was 57.5 percent. There is no question that earlier diagnosis, particularly roentgenologic diagnosis, is bringing a larger number of patients to seek relief at an earlier stage, before distant metastasis and local conditions have ruled out the possibility of surgical removal. With increasingly good diagnostic methods, particularly roentgenoscopy and proctoscopy, whereby one may now compare the diagnostic acumen with which organic lesions of the colon are observed, to that shown in gastric lesions, I believe the time is not far distant when more examinations of the colon, particularly following early symptoms of dyscrasia of the bowel, or as a part of routine general examination, will bring this group of patients to operation at a time when the horizon of operability will be extended largely and, at the same time, the hope of even better end-results will be reasonable.

COMPENSABLE HERNIA*

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In presenting the subject of compensable hernia I do not mean to infer that there is an accepted definition of this condition, nor shall I attempt

to offer a definition of my own. Because of the many parties involved in disputed cases, the subject is one of general interest, having both medical and legal aspects. It is a subject in which medical opinion should be instrumental not only in the adjudication of individual cases as they arise, but in formulating some definite working rules which can be used as a basis for classifying hernias as a whole.

To the average layman, especially the workingman, the condition we call hernia is known commonly as rupture—an unfortunate term, in that it implies an actual break or bursting of anatomical structures, and therefore resulting from, and to be ascribed to, some act of external violence. The frequent dramatic appearance of pain and a lump in the hernial region following even some slight exertion, cough, or sneeze, is sufficient proof to the average layman that the slight act in question was the cause, the sole cause, of his hernia, and that up to that time he was physically sound. Medical opinion does not support this contention; there is general agreement as to the congenital basis of most hernias, but it is just such cases that come before the industrial boards, because many of them first appear "in the course of" a man's occupation if not "arising out of it". That medical opinion is divided as to the part that trauma, direct or indirect, plays in the final act of hernial descent is attested to by medical opinions offered at industrial board hearings. Decisions rendered by state industrial commissions probably show the same lack of uniformity of opinion; this is not a reflection on the decisions of industrial boards or on the conflicting opinions of medical testimony, but rather an evidence of the difficulty of satisfactorily determining liability in so-called industrial hernias. It would seem, however, since the fundamental nature of hernial development is well understood from an anatomical standpoint, that a fairly definite, practical working basis could be established whereby the part played by trauma in any given case could be given its proper evaluation. Investigation along this line shows that representative medical opinion is fairly uniform, and that many industrial commissions have recognized hernia occurring in industry as a special problem, and not a few have adopted quite definite rules and regulations which are applied in cases coming before them for hearing.

Representative Medical Opinion: What is the present medical conception of trauma as a factor in the causation of hernia? I think this can be answered best by presenting extracts from opinions on this subject written by men whose experience lends authoritative weight to their opinions. I shall present some of these opinions briefly:

1. Coley, as early as 1903, in an address to the Railway Surgeons' Association, made the following statement: "From a very careful search through the surgical text books and literature of hernia one would gain the impression that trauma-

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tism is never a factor in the production of hernia, while a short experience in railway accident surgery will suffice to convince one that traumatic hernia, real or alleged, is of fairly frequent occurrence.

Although it must be accepted unconditionally that a hernia making its appearance at the time of the injury has never developed completely at that moment, nevertheless a casual connection must be recognized, since a pre-existing condition has been made worse by the accident or injury.

There is no question that violence direct or indirect may aggravate greatly an already existing hernia and may even cause strangulation, but this is far different from admitting that traumatism is a frequent cause of hernia.

Quoting again from Coley in 1907, in a review of 4,797 cases of hernia in males, he further says: "In a goodly portion of 1,695 cases giving trauma as a factor, the cause of the hernia was believed to be lifting or carrying some heavy weight. I think it is fair to assume that in the majority of these cases in which the hernia appeared directly after some unusual effort there existed some relation of cause and effect. Yet, we may here still assume the presence of a preformed sac, latent and empty up to the time of the unusual effort which increased the intra-abdominal pressure to such an extent as to force a portion of omentum or bowel into the empty hernial sac, thus producing an actual hernia. We must not forget that a sac which had been up to the time of the accident without contents does not constitute a true hernia. There must be, or must have been, something in the sac to make it an actual hernia, and just here is where the wide divergence of opinion arises, one group of writers considering that a hernia is always a disease, the other group regarding it as always due to an accident. Neither side is quite correct. * * *

"While I am a firm believer in the theory that in practically all cases of hernia, with the exception of direct inguinal and some femoral hernia, there is present from birth a preformed sac or pouch of peritoneum as the great predisposing cause of hernia, I also believe that a considerable number of individuals would carry these empty sacs to the grave without their ever becoming true hernia were it not for the co-existence of some exciting cause in the way of lifting, straining or other unusual effort which dilates and finally causes the latent empty sac to become filled with contents. Many of these cases, however, doubtless would have become complete hernia in later life in the normal course of events, without any straining or accident. * * *

"Industrial accidents of various sorts, usually lifting or straining in a false position, causing greatly increased intra-abdominal pressure, are regarded much more frequently as the cause of a hernia than the actual facts warrant. While in many of these cases such industrial accidents must

be looked upon as an actual exciting cause, in the great majority there will be found a congenital weakness in the way of a preformed sac and probably, in addition, an enlarged ring or weakened muscles. * * *

"The question of the relation of industrial accidents to the development of hernia is growing in importance from a medico-legal standpoint. In most of the European countries the courts have decided that hernias may be due to industrial accidents, and therefore are subject to indemnity. To prove the causal relationship, the hernia must have been examined very soon (within forty-eight hours) by a physician, and must present evidences of its recent origin. Proof of a predisposition, congenital or acquired, in most cases has influenced the courts to lessen the indemnity."

In *Keen's Surgery*, Sheen is quoted in part as follows: "When, if ever, is the surgeon justified in supporting the view of the workman that the hernia from which the latter suffers is due to a single 'strain'?" He states that often nothing may be felt at the time of the supposed strain; it may be days or weeks after the latter before he discovers the hernia. When found, it may be large or small; it may be attributed not to a strain, but to a blow in the groin, abdomen or elsewhere or to some other cause. The presence of a double hernia is sometimes attributed to a single strain. Sheen believes that such associations of strain and hernia as cause and effect are fallacious, although he does not think that the workingman, as a rule, intends to practice deception, but is influenced, first, by a desire to find a cause for the trouble; second, by the common use of the word "rupture" instead of "hernia", which produces in the mind the idea that the condition is one due to violence or injury. Sheen believes that the sudden, first appearance of a hernia, in the sense that it constitutes an accident arising from excessive strain, is very rare, but not an impossibility.

He states, in conclusion, that "a hernia may be felt for the first time during a straining effort, and this is very likely to occur in the working classes, who are constantly straining. This, however, is the occasion leading to the discovery of the hernia; it is not the cause."

The American Railway Association has taken definite steps to study this subject. In 1921 a committee was appointed by this association to make a careful study of the subject of traumatic and industrial hernia. The committee's report was published in 1922. Briefly reviewed they recognized three types of hernia, as follows:

1. True "traumatic hernia"—a hernia resulting from actual tearing of the abdominal wall from direct violence. These cases are extremely rare, and practically can be ruled out of consideration.

2. Hernia of weakness—a hernia due to congenital weakness of the abdominal muscles, or weakness through disease, causing atrophy of the muscles; also very rare, in the opinion of the

committee, as weakness alone without the presence of a preformed congenital sac rarely results in the hernia no matter how great the intra-abdominal pressure. These are practically all of the *direct* type.

3. The occupational hernia, or hernia of effort of the French. These furnish the basis of nearly all of the medico-legal cases of hernia. The committee states that it is recognized almost universally that the all-important cause of hernia of all varieties is the presence of a preformed sac of peritoneum—the *processus vaginalis*. The investigations of Russel, of Australia, they continue, force us to conclude that practically all hernias are of congenital origin due to this open pouch of peritoneum which has existed since birth. Unfortunately, they conclude, courts and juries, and compensation laws, here and abroad, have not kept pace with the developments of surgery and it is still not unusual to see large damages awarded in cases of so-called traumatic hernia. Russell maintains that an acquired hernia does not exist and recognized authorities on hernia have come to agree with Russell's conclusions.

The recommendations of this committee as published in 1922 follow:

1. Render proper compensation for all cases of true traumatic hernia due to direct violence. Such cases are so few as to be practically negligible.

2. Make a physical examination of all applicants for positions in industry no matter in what capacity; such examinations will determine the fact whether or not a hernia was present at the time of examination.

3. Any case of hernia, developing in the course of duty incident to the man's daily work, should be treated as a disease due to a special anatomical weakness on the part of the individual, for which the company is in no way responsible. If it is considered wise under certain circumstances to recognize any moral responsibility, let it be on an economic or humane basis. This moral obligation should be understood to be strictly limited to such employees who had been found apparently free from hernia at the time of previous physical examination.

This committee reviewed its recommendations in a report to the annual meeting of the American Railway Association in May, 1929. The report is published in the December, 1929, issue of *Annals of Surgery*. They present practically the same views as in their earlier report, and conclude with this general statement: "In those days it was believed generally by the juries that hernia often was caused *de novo* by the accident and hence the large damages. At present both courts and compensation boards have come to recognize the main contention of the committee, viz., that a hernia almost always is of slow formation and not due wholly to a single accident or strain and that the most that can be claimed is an aggravation of an already existing trouble." * * *

Moschcowitz, of New York, in a paper on "The Relation of Hernia to the Workmen's Compensation Law" makes the following general statement:

"The important points to remember in the formation of a hernia are two: first, the slight and insidious onset, and, second, the slow growth. In other words, no fully developed hernia ever is acquired at the first insult, or at the first disturbance of the balance between the restraining and the propulsive forces. How soon thereafter a complete hernia develops depends upon the frequency and magnitude of the increased propelling forces; in some cases it may take only days, in others it may last for years. The afflicted individual is only too prone to ascribe his hernia to one particular occasion, especially if he knows that a workingman's compensation award depends upon it. But (he concludes) you and I know that his hernia, which he may have only noted at that particular occasion, even if perfectly honest in his belief and statements, is only a culmination of many preceding insults, which may have antedated that occasion by years."

Colcord (Carnegie Steel Works), in a paper on hernia as a compensable injury, summarizes as follows: "A group intermediate between the traumatic and the ordinary variety may be designated as 'sudden hernias'. The great majority of hernias are of slow formation, the gradual dilatation by mesentery of a preformed sac. But sometimes when this sac is dilated almost enough to admit a knuckle of gut there occurs some unusual strain, not sufficient to bring it under the head of traumatic hernia, but enough to force the gut for the first time into a sac that is a tight fit. The stretching of the sensitive peritoneum at the ring, the pulling on the mesentery still unstretched and unused to such violence, the pressure of the filled sac on delicate nerves of the part, all combine to cause pain, tenderness, nausea and inability to continue at work. These are borderline cases, which often follow a real accident, often become strangulated and require immediate operation and usually appeal to compensation board or jury as ones that should be compensated."

Moorhead aptly states that "without a weak canal and rings at birth, no hernia will form subsequently unless rings and canal are torn asunder or weakened by some external or internal mechanism. There is from birth an empty sac awaiting contents, and this sac being continuous with that larger sac in the abdomen, will sooner or later seek an occupant." Such a sac is "an invitation for a resident by virtue of its empty loneliness. * * * Sudden increase in the size of any hernia is not uncommon if the parts are lax, and even an attack of sneezing or coughing or simple straining may be enough if the conditions are ripe. An accident may act in the same way if it is *adequate*, and this element, together with the extent of increase and the symptoms from it, determine to what degree, if any, a given injury is responsible for still further propelling

a hernia. The possessor of a hernia may become suddenly aware of ownership, but in reality the title to it may have been a birthright. The inguinal region can be compared to a pocket in a pair of pants: a small hole in the lower end of the pocket may not be noticed if only big enough to let a dime escape, but if a quarter and then half a dollar slip through, then attention is likely to be attracted to the gap. The element of adequacy is present if intra-abdominal pressure has been caused by violence of such an extent that added protrusion reasonably could be expected to follow.

One of the best and most concise discussions of this subject is found in Mock's "Industrial Medicine and Surgery." I quote his conclusions: "The great majority of hernias develop slowly—the gradual dilatation by mesentery of a preformed sac. The congenital defect or predisposition is the chief cause for such hernias, and the relation of natural occupation or of the natural acts of ordinary life is immaterial in their formation. These correspond to the gradual development of "flat-foot" as a result of faulty shoes, constant standing and walking or other natural causes; or to the development of tuberculosis in employees engaged in occupations which in no wise predispose to this condition.

"A small percentage of these hernias, however, make their first appearance after some unnatural occupational hazard which is out of all proportion to those ordinary or natural conditions. These correspond to the occupational diseases which are now recognized in some states as accidental and, therefore, compensable. These are border-line cases, for which no hard and fast rules can be laid down. The individual merits of each case must be considered carefully to arrive at an equitable settlement.

"Those surgeons who claim that only the true traumatic hernia is compensable do a great injustice to many employees. Those industrial commissions which claim that *all* hernias developing as a result of 'strain' are compensable do a great injustice to the employers. Both views are responsible for many of the fraudulent claims made for compensation by dishonest employees.

"'Traumatic hernia' is a misnomer as it indicates the very small group of hernias resulting from direct violence. Other types of hernia develop for which the occupation is more or less responsible and are described by Lothiessem and other German writers as 'accidental hernia'.

"I wish to advocate, therefore, that the term 'compensable hernia' be adopted in this country by both the medical and legal professions; and, further, that this term shall include all cases of true 'traumatic hernia' and all cases of 'accidental hernia' in which the force causing their development is directly the result of some unnatural occupational hazard."

I believe these medical opinions will serve to show that there is a general agreement as to types

of hernia and the relation of accident and injury to their development.

I also believe that compensation judges who hear testimony and render opinions as to liability in hernia cases coming under their jurisdiction should possess, or acquire, a working knowledge of the fundamental principles of hernial development. In other words, accepted medical principles regarding hernia should be applied practically in legal cases; otherwise the distinction between hernias arising "in the course of employment," and those arising "out of employment," is often apt to become a matter of chance or sentiment rather than one based on scientific fact.

For the purpose of obtaining the attitude of various state industrial commissions on this subject, I have received personal communications from the following states: Massachusetts, New York, Pennsylvania, Ohio, Wisconsin, Alabama, Colorado, Oklahoma, California and Arizona. My letter of inquiry contained the following questions:

1. Do you attempt to define specifically what constitutes a compensable hernia?
2. Do you regard hernias (aside from those resulting from direct injury to the abdominal wall) as accidents or disease?
3. In cases that come before the board for hearing, do you have any fixed criteria for deciding whether a hernia is or is not compensable?

Following is a brief resume' of the answers received, obtained either by direct information from letters, or as summarized from the industrial laws of the various states:

New York—Dr. Raphael Lewy, chief medical examiner of the New York Industrial Commission, gives his opinion of the points necessary to confirm accidental hernia, as follows:

- (a) The individual must be aware of the accident immediately and report same.
- (b) The accident can be either direct impact of force or a physical exertion.
- (c) The individual must perceive pain immediately in the inguinal region and is compelled to discontinue work, temporarily, in any event.
- (d) The pain, however, need not continue.
- (e) There must be evidence of a hernia either immediately or within a period of about twenty-four hours after an alleged injury.
- (f) The hernia ought to be small, but a severe strain may cause a complete scrotal hernia. (Murray, who reported autopsies on 200 men, who throughout their entire lives had no evidence or sign of hernia, found that thirty-four percent had a well-defined peritoneal sac, but no hernial contents.)

Pennsylvania—The Pennsylvania statute, as amended in 1927, contains the following paragraph relating to hernia:

"Hernia shall be considered as a physical weakness, or ailment, which ordinarily develops grad-

ually, and shall not be compensable unless, conclusive proof is offered that the hernia was immediately precipitated by such sudden effort or severe strain that: first, the descent of the hernia immediately followed the cause; second, there was actual pain in the hernial region; third, the above manifestations were of such severity that the same were immediately noticed by the claimant and communicated to the employer, or a representative of the employer, within forty-eight hours after the occurrence of the accident." The secretary of the board adds "that the amendment referred to has not changed the policy of the board with the exception of the fact that it must, of course, recognize the restrictions imposed, and it lessens the number of cases which can be held the result of accidents."

Arizona—(Duplicate of Nevada.)

- (a) Appreciating the tremendous difficulties which have arisen in other states over the question of hernia, our Industrial Commission has outlined a definite policy of providing an operation for any hernia occurring in the course of employment, regardless of whether the same arose out of the employment. As regards hernia occurring in the course of employment and which definitely appear to have been occasioned by the employment we allow compensation not to exceed two months.

In answer to your question No. 2, we regard all hernias (aside from those resulting from direct injury to the abdominal wall) as the result of a pre-existing condition or weakness. But, knowing the impossibility of differentiating in the mind of an injured man between the cause and the occasion for disability, we provide the repair without argument, and in about fifty percent of the cases pay compensation for a period of two months.

- (b) Arizona's statute is as follows:

"All hernias are considered to be injuries within the provisions hereof causing incapacitating conditions or permanent disability, and until otherwise ordered by the Commission the following rules for rating the same shall govern:

- (a) Real traumatic hernia is an injury to the abdominal wall of sufficient severity to puncture or tear asunder the wall, and permit the exposure or protruding of the abdominal viscera or some part thereof. Such injury will be compensated as a temporary total disability, and as a partial permanent disability, depending upon the lessening of the injured individual's earning capacity.
- (b) All other hernias, whenever occurring or discovered and whatsoever the cause, except as under (a), are considered to be diseases causing incapacitating conditions, or permanent partial disability; but the permanent, partial disability and the causes of such are considered to be as shown by medical facts to have either existed from birth,

to have been years in formation, or both, and are not compensatory, except it be proven: That the immediate cause, which calls attention to the presence of the hernia, was a sudden effort or severe strain or blow received while in the course of employment; that the descent of the hernia occurred immediately following the cause; that the cause was accompanied, or immediately followed, by severe pain in the hernial region, and that the above facts were of such severity that the same were noticed by the claimant and communicated immediately to one or more persons, in which event they are considered to be aggravations of previous ailments or diseases, and will be compensated as such for time lost only to a limited extent, depending upon the nature of the proof submitted and the result of the local medical examination, but not to exceed two months.

The *Indiana* statute does not specifically mention hernia as a compensable accident. However, Artman, in his manual, comments as follows:

"As a general rule occupational diseases are held not to be accidental injuries, and as a rule, in those states in which injury is required to be due to an accident, there is no compensation liability on account of disability or death resulting from an occupational disease. However, an occupational disease may be contracted under such conditions that it is an accidental injury.

"An accidental injury which greatly enlarges pre-existing hernia is compensable.

"The discovery of a hernia following the performance by an employee of his usual duties in the usual way, without any unusual exertion, blow, slip, strain, unexpected effort or unusual occurrence does not prove that, in such case, it is an accidental hernia.

"However, it has been held in *Indiana* that it is not necessary that there be an accident external to the body of the workman or a mishap in the environment which results in a hernia.

"When an employee is afflicted with a disease which has not yet progressed to the point of disability and receives an injury which accelerates the disease to the stage of disability, the injury must be regarded as the cause of disability."

These are conclusions which have been drawn from Industrial Board rulings in specific cases.

I believe it is evident from this review that many states, and especially those that have made a special issue of hernias, are formulating laws and regulations which conform to accepted medical opinion on the subject. That some decisions are still rendered which fail entirely to consider the fundamentals of hernial development, is no doubt common knowledge to most of us.

Industries today, especially those that handle their own compensation problems, are taking a broad view of this and similar borderline cases. In case of doubt, I believe employees usually are

given the benefit of the doubt, and a minor number come to a hearing before the Industrial Commission. Economically, industries probably could afford to accept, and to operate, all cases of hernia that appeared during employment, knowing that restoration of an employee to one hundred percent working capacity is always a profitable investment. I believe this is done in some industries, but this practice always raises the question of paternalism, of teaching employees to lean on their employer beyond what is expected ordinarily, and of unduly encouraging those who constantly are expecting something for nothing. The question of assuming liability for the outcome of a surgical case in which there is no legal liability is a business proposition, and sentiment must play the minor part.

Pre-employment examination is a measure that undoubtedly lessens the number of hernias arising in industry. This raises the question of accepting the applicant who has potential hernia, as evidenced by large, lax inguinal rings, poorly developed abdominal muscles, often with marked bulging along the entire inguinal canal. Such an applicant cannot sign a release for what may happen in the future, as under the industrial law no man may sign away his rights. Rejection of all such individuals would exclude many who actually do not have a hernia. The practice here is to make a complete record of the findings at the time of employment, and to accept those whose condition is compatible with the work applied for. It is recognized that a certain risk is assumed even with these precautions, but a careful record of an employee's condition at the time of employment should have some bearing on future decisions relating to an aggravation of such condition.

Summary and Conclusions: In conclusion, hernia is one of the industrial problems which has given industrial commissions considerable concern and one which still often is handled unsatisfactorily. However, I believe we may draw the following conclusions:

1. Excluding the true traumatic type, hernial development primarily is dependent upon predisposing anatomical conditions of the abdominal wall.
2. A simple act of lifting, straining, slipping, falling, etc., is very rarely, if ever, of sufficient violence to produce a hernia *de novo*.
3. Such acts are frequently the occasion by which the hernia is advanced to the point where it is brought to the attention of the owner.
4. Members of compensation boards who hear the evidence (in contested cases) should possess a knowledge of the fundamental nature of hernia, and such knowledge should conform to accepted medical opinion on the subject.
5. It is the consensus of opinion that there are fairly definite criteria for establishing a causal relationship of alleged accident to

hernia; these include an analysis of the history of the accident, reporting of the accident within a reasonable period, and the stage of hernial development as shown by physical examination. Equitable deductions can be made only when all of these factors have been correlated properly.

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DIAGNOSIS AND TREATMENT OF NONTUBERCULOUS SUPPURATIVE LUNG LESIONS

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In the past fifteen or twenty years our conception of lung suppurations has changed considerably. This has been brought about principally by the use of x-ray, lipiodol and the bronchoscope. I can recall a number of cases seen in tuberculosis sanatoria before the use of x-ray in which a non-tuberculous suppurative condition was undoubtedly present. Cases that coughed and expectorated purulent material over an extended period were treated as cases of tuberculosis, even though the sputum was consistently negative. Our present knowledge of non-tuberculous lung suppurations has been broadened materially, although there are many cases that require all our resources to make a definite diagnosis.

There are three common types of lung suppuration, and they may be coexistent—namely: bronchiectasis, empyema with bronchial fistula and lung abscess.

Bronchiectasis frequently is undiagnosed, particularly in the mild types, and many chronic bronchitis cases which clear up in the summer are in reality bronchiectasis with slight distortion of the bronchial tree. The history is very important in these conditions and a long-standing, productive cough which followed measles, whooping cough or pneumonia is probably due to bronchiectasis. These patients are often well nourished in spite of a long-continued lung condition. They are able to carry on their usual work, although flare-ups with fever, and hemoptysis are rather frequent in the winter months. These flare-ups are often due to a broncho pneumonia in proximity to the dilated bronchi.

Hemorrhages are rather frequent in bronchiectasis, and Vinson, of the Mayo Clinic, reports a study of one hundred cases each of tuberculosis, bronchiectasis and mitral stenosis with the following incidence of hemoptysis:

Tuberculosis, 29—11 slight, 15 moderate, 3 severe.

Bronchiectasis, 49—20 slight, 3 severe, 15 moderate.

Mitral stenosis, 18—10 slight, 5 moderate, 2 severe, 1 very severe.

Clubbing of the fingers is invariably present and is more marked in the severe cases.

The sinuses always should be investigated because a sinusitis often will be present and particularly is this true of the antra. Physical examination usually is of no value in making the diagnosis. However, rales may be heard in the bases where the lesion generally is located. In a large sacculation we may get signs of cavitation, depending on the amount of secretion present. The x-ray is likewise of little value, although marked thickening of the bronchial trunks is suggestive of a bronchiectasis. The instillation of lipiodol or a similar substance into the bronchial tree generally will visualize the dilated areas either with the fluoroscope or x-ray film. It is, therefore, imperative to use lipiadol with the x-ray in making a diagnosis of bronchiectasis. Needless to say, at least ten negative sputums should be secured in any lung suppuration before we can rule out tuberculosis. This will be sufficient in most cases that have a purulent sputum; however, it must be remembered that tuberculosis occasionally is activated by a prolonged lung suppuration.

Treatment of Bronchiectasis: The treatment of bronchiectasis is not very satisfactory for permanent results because a mechanical condition is present. Postural drainage should be tried and in some cases it markedly decreases the expectoration. The sinuses should be taken care of, and improvement of the lung condition often will parallel that of the sinusitis. Installation of small amounts of lipiodol is beneficial in some cases, and has been advocated particularly by Pritchard at Battle Creek. Pneumothorax is valuable in unilateral cases, and Singer and Graham, of St. Louis, reported several apparent cures by that method.

Bronchoscopic drainage is recommended by some writers, and Clyde Heatley, of Rochester, New York, states that advanced bronchiectasis may be prevented by bronchoscopic treatment in childhood. In cases having foul sputum containing anærobic organisms the arsenicals may be tried, and some writers have secured good results from them. However, in my experience, I have not found them very satisfactory. The well-established case of bronchiectasis usually is incurable and its prevention should be understood more generally. We know that these cases follow sinusitis with respiratory infection in childhood and it seems safe to assume that proper supervision at that time would prevent the development of chronic bronchial conditions.

Lung Abscess: Lung abscess is a more common condition in this medical era because wholesale extraction of teeth and tonsillectomies have been added to previous causes. Studies by Wittemore and others have shown that fifty percent of lung

abscesses follow such operations. This may be doubted by the nose and throat surgeon or dentist because they are apt to lose touch with the patient shortly after the operation, and the abscess may not become evident for several weeks after the operation. The condition of the mouth at the time of operation is an important point because a large percentage of abscesses are caused by anærobic bacteria. There may be direct inhalation of the infected material or transmission by the blood stream. Klein and Smith have produced pulmonary abscesses by intratracheal injections of scrapings from infected teeth. Cutler and Schueter produced lung abscesses by placing emboli infected with anærobes into the jugular vein of animals. Many cases can be traced to the aspiration of a foreign body and Jackson reported 200 such cases from his clinic.

In Lord's series of 227 cases it was shown that one-third were due to operation on the upper respiratory tract:

| | |
|--|----|
| Tonsillectomy | 49 |
| Extraction of teeth | 21 |
| Operation for cancer of jaw, tongue or lip | 8 |
| Drainage of peritonsillar abscess | 2 |
| Removal of adenoids | 1 |
| Nasal operation | 2 |
| Operations and general anesthesia | 18 |
| Inhalation of foreign body | 8 |

M. F. Moore estimated that abscess following tonsillectomy occurs in every 2,500 to 3,000 cases.

L. H. Clerf analyzed fifty-eight cases following tonsillectomy and found monolateral lesions in all except one, the right lung being involved in two-thirds of the cases. Forty-five percent involved the upper lobes as compared to thirty-two percent in the lower. Fifty-five of the 58 cases had been operated under general anesthesia.

Malignancy causes a certain percentage of cases and Graham reported ten percent of 330 lung abscesses were associated with malignancy. Many cases are caused by a pneumonia which does not clear up, and here the pneumococcus is the predominating organism. Many of the pneumonia abscesses really are interlobar empyemas, and it is often difficult to distinguish between them.

Lung abscesses usually cause a profound toxemia with high fever and symptoms of sepsis. This may go on for several weeks when finally the patient will expectorate a large amount of foul pus. There will have been varying degrees of pain in the affected side and dyspnea. The fingers become rapidly clubbed, although it generally is not so marked as in bronchiectasis.

The physical signs are often negligible and depend on the proximity of the abscess to the periphery. Rales may be heard with bronchial breathing. Dullness may be elicited. At best the physical examination cannot be depended on entirely and the x-ray always should be used. The x-ray generally will show the abscess shadow and lipiodol may be helpful in mapping out its extent.

Treatment: The treatment of lung abscess requires teamwork and each case must be studied carefully as to the proper procedure. Twenty-five percent of lung abscesses will heal spontaneously, and they usually are located close to the hilum, where they are drained easily. There is no specific treatment for lung abscess, and each case will have to be studied for the best method of approach. The prognosis in this condition always should be guarded, and the patient's family should be informed as to the seriousness of the condition. Lord collected data from 227 cases in the Massachusetts General Hospital and of 110 not operated on, ten percent recovered, fifteen percent improved and seventy-five percent died; while of 117 operated on, 15.8 percent recovered, 18.8 percent improved, and 47.8 percent died. His mortality rate probably is higher because the hospital cases usually are more serious.

In all types of cases bed rest should be given an extended trial. The nutrition may be improved, the cough and expectoration diminished and the toxic symptoms reduced. This should be continued for several months in most cases before more radical measures are considered. Postural drainage should be started soon after the abscess ruptures into a bronchus; however, hemorrhage, cardiac disturbance, or marked prostration are contraindications. The postural drainage may be tried every three to six hours during the day, starting with three minutes and gradually working up to ten or fifteen minutes each time. The patient will soon learn the optimum time and position which will give him the best drainage. The cross bed position with the head to the floor will answer the purpose in most cases. Infection of the mouth or sinuses always should be treated if present, because many cases have their inception there. A well-balanced diet with at least one quart of milk daily should be prescribed. Cod liver oil, if well tolerated, is beneficial. Drugs are of little use except in some spirochetal cases which may be benefited by arsenicals. In J. A. Miller's series of cases, forty to fifty percent recovered with the rest postural drainage treatment. He is against early surgery and states that it carries a mortality of sixty-five to seventy percent. Frequent x-rays are valuable in depicting the progress of the disease. Bronchoscopy is imperative where there is any suspicion of a foreign body. Jackson has emphasized the difference between foreign body abscesses and those due to other causes. The foreign body abscesses will clear up promptly after removal of the irritant and this may be true in cases of years' duration. It is advocated by some in the early treatment of lung abscess, but unless it is done by a skillful, experienced bronchoscopist, it is considerable of an ordeal and not without danger.

Pneumothorax may be tried in cases that do not heal after one or two months of postural rest treatment. It is more successful in upper lobe abscesses or those situated near the hilum. It

must be used very carefully because with a ruptured adhesion a fatal pyothorax may result. A number of writers have reported cases successfully treated by it, including Tewksbury, Anderson, Lloyd, Singer and Graham.

The lung should be collapsed slowly and it is dangerous to use positive pressure in most cases. The air may press on the draining bronchus and shut off the drainage, in which case withdrawal of the air is imperative. The collapse should be continued for at least six months if satisfactory results are being obtained.

My results with pneumothorax in eight cases are: two cured, four improved and two unimproved. The two unimproved cases were not kept on the treatment long, and finally died—one of them after excessive chest surgery was performed. In neither case did the pneumothorax seem to hasten the process.

Thorocoplasty, either partial or complete, is indicated in some cases and particularly in cases of chronic multiple abscesses involving the lung.

Cautery pneumonectomy as advocated by Graham seems the safest method to drain an abscess externally. He reports forty-five cases, of which thirty-one, or sixty-nine percent, became free of symptoms after this operation.

In conclusion, the following points should be emphasized:

1. Bronchopulmonary suppurations often are diagnosed in less curative stages because the x-ray is not used.
2. Bronchiectasis is incurable in well-established cases and could often be prevented by proper treatment in childhood.
3. Rest and postural drainage are the best medical treatment of lung abscess.
4. Pneumothorax is valuable in many cases, but is not without danger.
5. Bronchoscopy should be used if a foreign body is suspected.
6. Cautery pneumonectomy and thorocoplasty are valuable in selected cases.

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COMBINED PERNICIOUS ANEMIA AND DIABETES MELLITUS*

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Bowen and Aaron,¹ in 1926, reported the discovery of gastric achlorhydria or subacidity in a large proportion of patients suffering from dia-

*From the Lilly Laboratories for Clinical Research, Indianapolis City Hospital.

betes mellitus, and commented upon the rarity of coexisting diabetes and pernicious anemia. Hitz-rot,² in 1929, collected from the literature six cases in which these diseases occurred together, and reported a seventh case. Goudsmit³ recently has added one case of his own and four others from clinics in Rotterdam, Amsterdam, and Leiden. Arntzen⁴ and Bowen⁵ also very recently have reported one case each in which the two diseases coexisted. Root⁶ states that "the occurrence of twelve cases of combined diabetes and pernicious anemia at the Deaconess Hospital during the last two years led to a search of the literature and the finding of a total of thirty-two such cases." It therefore appears that the coexistence of these two diseases is of rather uncommon occurrence.

In a study of 115 patients with pernicious anemia, the combination with diabetes was noted in only one instance.

CASE REPORT

History: O. P., a white male, age fifty-one, married, and a machinist, was first seen at his home September 11, 1928. He complained of weakness, palpitation on exertion, numbness and tingling in the feet and hands, loss of appetite (especially for meat), loss of weight, epigastric pain, yellow color of skin, sore mouth and tongue, diarrhea, abnormal taste, failure of hearing, and edema of the ankles. A diagnosis of pernicious anemia was made, following blood studies, and the patient was referred to the Indianapolis City Hospital on September 13, 1928.

He stated that his illness had begun about a year before, and was characterized by gradually increasing weakness, fatigue, and irritability. After four months these symptoms abated and he felt much better. Within a short time, however, his weakness returned, this time associated with numbness, first in the feet and then in the hands. His appetite, especially for fresh meats, became very poor. He was troubled with bloating after meals, and was nauseated frequently but did not vomit. His color became at once pale and yellow. He had lost about ten pounds in weight. His gums were tender and the tongue sore at times. Gradually he noticed increasing swelling in his ankles. He became dyspnoëic and suffered precordial pain on exertion. He had one attack of diarrhea two weeks prior to admission.

In 1919 he had a hernioplasty and a vein stripping operation for varicosities of the right leg. In 1925 he had a hemorrhoidectomy. Otherwise his past history was negative.

His father died at the age of fifty-seven with carbuncles. His mother died at seventy-seven. The cause of death was not known definitely, but possibly was diabetes.

Physical Examination: The patient was a tall, slender man with blue eyes and gray hair. The skin was quite yellow, but on the exposed surfaces showed considerable bronzing. He was very weak and dyspnoëic on exertion.

The scleræ were icteric and the conjunctivæ pale. The hearing was impaired slightly. All the natural teeth were absent. The tongue was pale and smooth; the surface of the tongue was marked with numerous channels. The anterior cervical lymph nodes were palpable.

The lungs were normal. There was a definite systolic murmur at the apex of the heart. This murmur was transmitted to the axilla.

The liver and spleen were not palpable.

There was considerable evidence of muscular wasting in the extremities. There were several scars (operative) on the right leg. The epitrochlear lymph nodes were palpable.

The tendon reflexes of the upper extremities were present, but those of the lower extremities were absent. The cutaneous reflexes were intact. There were no hyperesthesias or anesthetics.

His weight was 117 pounds.

Laboratory examinations revealed the following findings: erythrocyte count, 1.4 million per cubic millimeter; hemoglobin, 31 percent; color index, 1.1; leukocyte count, 4,400 per cubic millimeter; blood bilirubin, 0.88 milligram per 100 cubic centimeters. Gastric analysis (fractional method) showed the absence of free hydrochloric acid. Urinalysis, normal findings. The blood smears showed macrocytosis, anisocytosis, poikilocytosis, and thrombopenia.

A diagnosis of pernicious anemia was made and liver extract No. 343, in daily amounts derived from 300 grams of fresh liver, was started on September 14, 1928. The hematopoietic response was quite satisfactory, the reticulocyte peak of 455,000 having occurred on the ninth day. The erythrocyte count and hemoglobin increased accordingly, and the patient was released on October 3, 1928, in a much improved condition.

Following his stay in the hospital, the patient took faithfully the liver extract, and reported at regular monthly intervals for re-examination. He was able to return to his work early in January, 1929. About June 15, 1929, however, he suffered a gastro-intestinal upset after drinking a quantity of iced water. This lasted several days, after which he noticed an increase in frequency of urination and a great thirst. He suffered pain in his back and became quite weak.

On July 16, 1929, the patient was readmitted to the Indianapolis City Hospital after his physician had discovered a large quantity of sugar in the urine. He had been on an unweighed diet for ten days prior to admission. When first seen in the hospital at this time he was very weak. His respirations were rather deep, but not accelerated. The mucosæ were quite red. He appeared acidotic although acetone was not detected on the breath. He was quite drowsy and fell asleep easily.

His urine contained a large amount of sugar, and gave positive tests for acetone and diacetic acid. The blood sugar was 322 milligrams per 100 cubic centimeters. He was given orange juice

and insulin every two hours until the urine was free of sugar and acetone. On July 17, 1929, the fasting blood sugar was 202 milligrams, and the night urine was free of acetone. He was started on a diabetic diet of 75(C)—60(P)—110(F) with the noon meal. After two weeks the diet was increased gradually to 90—70—180, and the insulin dosage was regulated to 10—0—3, which kept the patient's urine sugar free. The blood counts during this admission were normal. He was released from the hospital on July 31, 1929, in good general condition.

Since his second hospitalization the patient has returned to work, and it has been necessary to increase his diet and likewise the insulin. He now receives daily twenty units of insulin and the amount of liver extract derived from 300 grams of fresh liver.

The erythrocyte count is normal. The neural changes have not progressed. He is at present in a fair state of general health, and works every day.

COMMENT

1. It would seem that coexisting pernicious anemia and diabetes mellitus constitute a comparatively rare combination.

2. Blottner and Murphy⁷ have reported that liver contains a blood sugar reducing substance, but that this substance is not contained in fractions of liver which are effective in pernicious anemia. The case here reported seems to confirm this observation, in that no blood sugar reducing action of the liver extract was apparent.

3. The present condition of this patient demonstrates clearly the benefits to be derived from researches which have developed two relatively specific therapeutic agents—insulin and liver extract.

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APPARATUS AND TECHNIQUE FOR VARICOSE VEIN INJECTION

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It is my purpose to present in this paper a description of apparatus and technique used in the injection of varicose veins which I find provides for quickness, ease and accuracy in this procedure. I make no claim for originality in describing this equipment; it is identical with that described by F. V. Theis, who reported it as a "find" of his in Vienna. I have added to this an aspirating syringe which I have not seen described.

My apparatus consists of a varicose vein "occludor," a ten cubic centimeter syringe for the scler-

osing solution, a thirty cubic centimeter syringe for aspiration, two inches of rubber tubing (catheter size), a two-way stop-cock the three openings of which are shaped for syringe, needle and rubber-tubing, respectively, and a 1½-inch, 22-gauge Vim needle with short beveled point. The occludor is an oval about five centimeters by three centimeters, from one side of which springs a handle, slightly outward from a perpendicular plane. This handle has a well-shaped, comfortable grip, an important item in its usefulness. This instrument is used to isolate the section of vein to be injected, and to retain the sclerosing fluid within that section for five minutes after injection.



Equipment for injection of varicose veins.

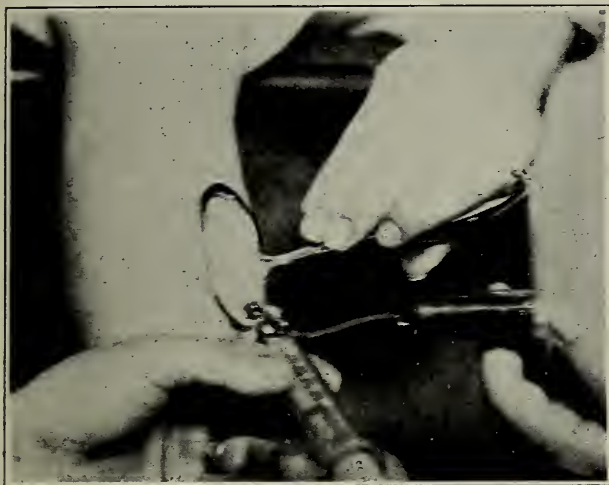
The ten cubic centimeter syringe containing the substance used for injection is attached to the stop-cock with the stop-cock turned against flow from this direction. The needle to be attached to the stop-cock may vary in gauge, according to the solution to be used. Sugar solutions require larger needles than sodium chloride or salicylate. The needle must be short-beveled, otherwise the opposite wall of the vein may be perforated before the aperture of the needle is completely inside the vein; these injections must be leak-proof.

The thirty cubic centimeter syringe is attached to the two-way stop-cock through the rubber tubing, and is used to withdraw the blood from the section of vein isolated for the injection. I have found the elevation of the leg is not sufficient to collapse the vein completely. If blood is present in the section of vein to be injected it dilutes the sclerosing fluid, diminishes by its volume the amount of foreign substance injectable and probably coats and protects the intima from the sclerosing substance. A thoroughly collapsed vein, such as can be produced by suction after elevation of the leg, makes for a much more effective operation.

After shaving and thorough cleansing of the area selected for injection, and with the leg in the dependent position, the varicose vein occludor is placed upon the vein and the needle is inserted into the vein. The stop-cock is in the position permitting flow from the needle into the thirty

cubic centimeter syringe. The leg is elevated to permit as much emptying of the vein as possible. Then by aspirating with the thirty cubic centimeter syringe all the remaining blood in the vein is withdrawn, and the vein within the circumference of the occludor is collapsed completely; its course is marked by a depression in the skin.

The stop-cock is then turned and the sclerosing agent is injected slowly. At this point the patient may complain of cramping, which is of little importance, or of a burning sensation, which is a signal for immediate cessation and investigation, indicating that the vein is leaking sclerosing fluid into the perivascular tissues.



Method of injection of varicose veins.

After the vein is distended fully I turn the stop-cock and reinject a few drops of blood from the thirty cubic centimeter syringe, thus clearing the needle of sclerosing substance and preventing trailing it through the tissues in withdrawing. The occluder is kept on the vein for a period of five minutes after the needle is withdrawn. Then a tight compress is strapped over the injected portion of the vein, to be left on a few hours. The patient is permitted to leave the office.

Within a few hours the injected vein becomes tender and indurated which subsides within a day or two. The venous induration gradually involutes into a fibrous cord in from four to six weeks.

This procedure may be repeated as often as every three days, or indefinite intervals may elapse between the obliterations of different varicosities. It may be performed in the outer margin of sloughing varicose ulcers or on single isolated varicosities. I believe it a logical therapeutic procedure in any varicosity of the lower extremity due to loss of venous valves.

SURGERY OF THE CLOSED PUPIL*

ALBERT E. BULSON, M. D.

FORT WAYNE

What to do for the closed or occluded pupil is a problem that often confronts the eye surgeon,

and failure to solve the problem or to give it any consideration may spell the doom of the patient so far as useful vision is concerned. Occlusion of the pupil is not as common as it was in an earlier day when operative treatment and therapeutics were not as successful as they are today, but the unfortunate condition occurs sufficiently often to justify a serious consideration of means and measures for overcoming it.

A closed pupil may occur as a direct result of unskillful surgical procedures, of trauma and of a retention of lens matter following cataract extraction of both hard and soft cataracts; nearly all are made worse by inflammatory reaction and a deposit of plastic exudate in the pupillary area. Most of the cases seen today are what may be termed membranous occlusion of the pupil following removal or attempted removal of the lens with subsequent closure of the pupil by thickened lens capsule or inflammatory exudate. Often there is also a fluid vitreous due to degenerative changes. Occasionally cases are seen in which the occlusion of the pupil has followed directly as a sequel of repeated attacks of iritis, perhaps badly managed, and closure of the pupil by an organized exudate. The latter perhaps may be benefited by an optical iridectomy, but as a rule there have been degenerative changes in the lens, with the development of cataract requiring extraction, and in the end there usually remains the occluded pupil which will require attention if any effort is to be put forth to give the patient useful vision.

According to Wood (*System of Ophthalmic Operations*) the making of an artificial pupil was done first over two hundred years ago, in 1728, by Cheselden. His operation was made with a knife-needle, and the opening was a long, oval slit, horizontally placed. This operation, with certain modifications in technique, was performed by others for a period of forty years, or until 1768, when the scissors method came into use. This consisted in introducing a pair of fine scissors through an opening in the cornea and either puncturing the iris with the blade of the scissors or putting one blade of the scissors through an opening previously made with a knife and then dividing all structures in such a way as to make an artificial pupil. This operation, with various modifications, was practiced for a number of years, and the DeWecker modification, proposed in 1873, still is recognized as perhaps the best of the scissors operations.

Within recent years the knife-needle operation has returned to popularity, largely through the efforts of the late S. L. Ziegler, who, after several years of experience and perfection of technique, published his classical article on the subject in 1908, after presenting the same before the Section on Ophthalmology of the American Medical Association. In presenting the subject Ziegler insisted that success depended upon the selection of a knife with a very sharp point and sharp

*Presidential address presented before the Indiana Academy of Ophthalmology and Otolaryngology, December, 1929.

cutting edge, the cutting edge being seven millimeters long, the blade not to exceed one millimeter in width at its widest point, with a rounded shank the same diameter throughout, and a certain definite technique in the performance of the operation. The knife-needle that he recommended has been made ever since according to his specifications and is sold by instrument makers under the name of the Ziegler knife-needle.

Originally the knife-needle advocates made a single incision through the iris, exudate and capsule, and trusted to the natural retraction of the iris fibers to maintain the artificial pupil, and, while such an operation had the advantage of easy accomplishment and less post-operative disturbance, yet the opening frequently closed by plastic exudate. On the other hand, the scissors method, even if it produced a good pupil, was more difficult of accomplishment, caused more traumatism to the eye, often was complicated by great loss of fluid vitreous, and frequently was followed by severe inflammatory reaction. If, however, it proved successful, the resulting pupil was permanent and sufficiently large for visual purposes.

Recognizing the disadvantages of all operations previously performed for opening the closed pupil, Ziegler conceived the idea of making two incisions, jointly, V-shaped, apex upward, the two incisions being joined at the apex before the removal of the knife-needle from the eye. The advantages of the operation, as so well stated by Ziegler, are the ease with which the incision is made, the lack of traction on the ciliary body, the freedom from postoperative inflammatory reaction, the avoidance of opening an eyeball which may contain fluid vitreous, the lessening of the tendency to iris hemorrhage from lowered tension, and the avoidance of the nebulous scar which often follows a large corneal incision in old inflammatory eyes. The disadvantages revealed in the method have been ascribed to faulty instruments as well as faulty operative technique.

To Ziegler, we owe much for an operation, which, if carried out according to his method and technique, offers many advantages over any other surgical procedure so far recommended for the closed pupil. The point I especially wish to emphasize is the fact that the closed pupil, particularly in the hands of those who have not had wide experience and excellent training, and even sometimes by the latter, is too often considered a hopeless condition and the patient is not given the benefit of a procedure that in a large percentage of cases gives favorable results. Some of the patients presented to us are blind in both eyes, or perhaps in the only remaining eye, and the recovery of useful vision, even to the extent of enabling the patient to get around unattended, is a great godsend to such unfortunates.

It may be that the occlusion of the pupil is due to an exudate under which there is a very thin capsule, a condition holding the most promise, or it may be that the obstruction is due to very dense

plastic material and underneath that a very tough membrane, all of which offers unusual difficulty in securing a pupil. Then too, there may be, and usually are, extensive degenerative changes, including fluid vitreous and perhaps some detachment of the retina, which offer further difficulties in securing useful vision; yet, if fairly good light perception and light projection are retained, some hope may be held out to the patient concerning recovery of at least better vision than he possesses with the pupil entirely closed.

It also should be noted that some of these closed pupil cases, having a moderate amount of increased tension and perhaps a mild type of persistent congestion of the eyeball, are benefited by an iridotomy by the Ziegler method; I have tried it several times in such cases with fairly satisfactory results, and have perhaps avoided an enucleation that seemed unavoidable.

In my own experience the Ziegler operation for closed pupil has usually been very satisfactory, and I know that in several instances I have made the patient very happy through the restoration of useful vision when previously the patient was helpless, and although the eye condition had been pronounced hopeless by other ophthalmologists. I desire to emphasize the necessity of following the Ziegler technique throughout; and in this connection I take the liberty of quoting from the original article by Ziegler presented at the Chicago session of the American Medical Association in 1908, which paper I had the privilege of discussing at that time. The essentials of success of an iridotomy by the knife-needle method as condensed from Ziegler's description are as follows:

(1) A good knife-needle (Ziegler's) must be selected. It must have a well-sharpened point and edge.

(2) The character of the incision in the iris membrane is of vital importance. It should be a double incision, and V-shaped, which is the only one that will cut through all the iridic fibers in such a way as to give the greatest retraction of the membrane.

(3) No pressure should be made in cutting, which is the main secret of success whether you are incising a dense, feltlike iris membrane, or a thin, filmy capsule. If this rule is observed all traction on the ciliary body will be avoided.

(4) The knife-needle should slide backward and forward through the corneal puncture with a gentle sawing movement.

(5) The corneal puncture above and the membrane counterpunctures below should be far enough apart to make the corneal puncture a good fulcrum for the delicate leverage necessary in executing the iris incision.

(6) The knife-needle should be so manipulated that no aqueous is lost, for this accident may prevent the completion of the operation and may increase the tendency to iris hemorrhage by lowering the ocular tension. The shank of the knife,

being of the same diameter throughout, tends to prevent escape of aqueous.

(7) Every incision should be made a thoroughly clean-cut incision and all tearing of the tissues should be avoided.

(8) Perfect artificial illumination should be secured, as both iridotomy and capsulotomy require constant and close inspection of the operative field. My own preference is the light from a focused spotlight.

The technique of the operation is expressed so clearly and comprehensively in Ziegler's original paper that repetition seems unnecessary. Success depends upon following the technique as described. The puncture of the cornea should be above near the limbus, and the two counterpunctures below should be approximately three millimeters from the apparent iris circumference and five or six millimeters apart. The knife should cut and not tear, the incisions being carried out by a gentle, sawing movement. Failure may occur as the result of using a knife-needle that is not extremely sharp, or in not separating all of the fibers at the apex of the triangle. It is better to have the two incisions cross in order to effect a division of all the fibers. If the flap does not retract it may be crowded down with the point of the knife. Sometimes a second introduction of the knife is necessary in order to cut the fibers at the apex which can not be divided, because the apex is too close to the fulcrum. Tearing of the membrane, puncture of the ciliary body, or undue traction of any kind may cause inflammatory reaction.

Ordinarily there is little or no reaction and the corneal wound is closed within three or four days. If post-operative inflammatory reaction does occur, the usual antiphlogistic treatment consisting of elimination, ice compresses, and salicylates is indicated. Occasionally a very dense, fibrous membrane involving a portion of the iris and pupillary space must be avoided, and the artificial pupil must be placed in tissue that yields more easily to the knife, but in the main if the sharp knife-needle is properly used it will cut almost any tissue encountered.

The anesthesia ordinarily employed in cataract extraction, including subconjunctival injections of the anesthetic, is satisfactory.

While I have used the Ziegler operation in a number of cases with excellent results, I desire to report only three; all were given up by the physicians who had operated them, and all show the possibility of obtaining useful vision in apparently hopeless cases.

CASE REPORTS

Case 1. A housewife aged fifty-seven years had had an unsuccessful cataract extraction by the combined method in 1907. The history indicated that a second attempt had been made to remove the lens matter through a corneal incision. Subsequently the pupil had become closed with a thick capsular membrane and inflammatory exudate.

The attending physician had finally advised the patient that her condition was hopeless and that there was no possibility of securing useful vision. He had advised removal of the complicated cataract in the other eye, but as a result of her unhappy experience she had declined to have the work done.

I saw the patient ten years later, and at that time she had sufficient vision in her unoperated eye to see large objects and get around unattended in familiar surroundings. In the so-called blind eye she had only fair light perception and light projection.

An operation by the Ziegler method was performed on July 24, 1917. The pupillary area was closed by dense tissue consisting of lens capsule and inflammatory exudate, but, by taking sufficient time to make the V-shaped incision, a good sized clear pupil was obtained. The vision with a correcting lens a week after the operation was 15/40; twelve years later, or on June 19, 1929, the vision was 15/30—3, with a correction of +9.00 sphere +4.50 cylinder axis 70 degrees.

Case 2: A farmer, aged forty-five years, gave a history of pronounced rheumatic iritis and repeated attacks of inflammation of both eyes dating back twelve years. In 1907, the left eye, which had been blind and painful for several months, was removed. Fifteen years later the patient came under my care, and his remaining eye was found to have a completely closed pupil from an organized exudate. Vision was reduced to light perception. The tension was below normal, indicating extensive degenerative changes, but the eye was free from active inflammation.

A through and through V-shaped incision was made, which included not only the iris and organized exudate in the pupillary area, but also included the lens, which unfortunately did not luxate during the operation as expected. Several days later the anterior chamber contained considerable lens matter, but there was no very active inflammation present and the patient was not uncomfortable. A milk injection was administered, and hot, moist compresses were applied to the eye. Gradually the anterior chamber cleared, and when the patient was seen last on April 19, 1926, more than four years after his operation, he had a vision of 15/200 with a correcting lens. He informed me at that time that he was driving a truck for a coal yard, and for the first time in twelve years he was able to get about unattended and to earn a living for himself and family.

Case 3. Housewife, aged fifty-three years. Three years prior to seeing me she had undergone a cataract extraction in the right eye. The operation had been followed by a succession of inflammatory attacks which finally left her with a closed pupil and vision reduced to light perception. She had been told by her physician that nothing more could be done for the eye as intraocular degener-

ative changes had made it impossible to restore any useful vision.

Examination showed that the tension was but slightly reduced, and the eyeball was free from inflammation. The vision in the fellow eye was reduced to shadows as a result of cataract. In March, 1928, the Ziegler operation was done, and resulted in a good-sized central triangular pupil. Two weeks later a correcting lens of +11.00 sphere +4.00 cylinder axis 170 degrees gave the patient vision of 15/30, and that vision has been retained up to this date.

These three cases can be duplicated by others that have come within my experience; they indicate the possibilities in cases of closed pupil that are hopeless as well as helpless unless something is done for them. Perhaps a considerable number of such cases do have a fluid vitreous and other degenerative changes which seemingly offer a decidedly unfavorable prognosis, especially if relief is attempted by performing an operation requiring opening of the eyeball by incision. However, everything is to be gained and little or nothing to be lost through an attempt to secure at least useful vision, and, therefore, the Ziegler operation is worthy of a trial in these unfortunate conditions. If it fails, the patient usually is no worse off than before, and we still may try the more formidable scissors operation. Even if an enucleation becomes necessary in consequence of reaction set up as a direct result of the attempt to restore some vision the patient is little or no worse off than before.

SPECIAL ARTICLE

DIPHTHERIA DEATHS IN 1930

The month of October starts out with a bang so far at least as diphtheria cases are concerned. For the week ending October 4th there were sixty-three cases reported for the entire state. This constitutes an alarming situation and should call for the prompt attention of the medical profession. Fortunately for the remainder of the state nearly all of these cases were confined to Lake and Porter counties, there being sixteen cases reported from Lake and twenty-nine from Porter. If we were disposed to be nasty, we would be in the position of saying, "I told you so," inasmuch as we have pointed out repeatedly in this little space that a dangerous situation existed in the northern corner of the state. The physicians of Porter county have been caught napping. They have had abundant opportunity to know that they were between two diphtheria foci—a large one in Lake county and a small one in St. Joseph and Laporte. The week ending October 11th shows a marked decrease in the number of cases from the preceding week, but the four counties in the northern tier on the west report a total of sixteen cases. We shall be very much concerned about the situation in this region

for the next few weeks. The week ending October 11th also shows a sharp increase in the number of cases in Marion county, ten having been reported. This is the time of the year when diphtheria goes on the rampage and we are extremely anxious to hold the number of deaths and cases to the lowest possible figure.

Concerning the deaths last month, there were twelve deaths in twelve counties. Of these twelve, six are entering the black list for the first time: namely, Daviess, Dearborn, Fulton, Madison, Porter and Spencer. The total number of deaths so far this year for the first nine months is eighty-six, as compared with 158 for the entire twelve months of last year. It is still far too early, however, to congratulate ourselves on a good record for the reason that the three big months are yet to come. Unless strenuous precautions are taken, it very well may happen that those three months will see a total of seventy-two deaths, which would mean that we were equaling exactly last year's record.

We are giving below a list of counties which have had diphtheria deaths and the number in each:

| | Total for 1930 | Sep- tem- ber | | Total for 1930 | Sep- tem- ber |
|----------------|----------------------|---------------------|-------------------|----------------------|---------------------|
| Allen | 2 | 0 | Marion | 12 | 1 |
| Clark | 4 | 0 | Miami | 1 | 0 |
| Clinton | 1 | 0 | Monroe | 3 | 0 |
| Daviess | 1 | 1 | Montgomery | 2 | 1 |
| Dearborn | 1 | 1 | Morgan | 1 | 0 |
| Delaware | 2 | 0 | Perry | 1 | 0 |
| Dubois | 1 | 0 | Porter | 1 | 1 |
| Elkhart | 2 | 0 | Randolph | 1 | 0 |
| Fulton | 1 | 1 | St. Joseph | 3 | 1 |
| Greene | 1 | 0 | Spencer | 1 | 1 |
| Hamilton | 1 | 0 | Sullivan | 2 | 0 |
| Howard | 1 | 0 | Tippicanoe | 1 | 0 |
| Jay | 1 | 0 | Tipton | 2 | 0 |
| Gibson | 1 | 0 | Vanderburgh | 5 | 1 |
| Knox | 5 | 0 | Vigo | 1 | 0 |
| Lake | 12 | 1 | Warrick | 1 | 0 |
| LaPorte | 2 | 1 | Wayne | 1 | 0 |
| Lawrence | 6 | 0 | White | 1 | 0 |
| Madison | 1 | 1 | | | |
| | | | | 86 | 12 |

ENDOCRINE STUDIES

This report by ALLAN WINTER ROWE, Boston (*Journal A. M. A.*, Oct. 25, 1930), deals with an approach from the opposite point of view and is concerned with the statistical analysis of a long series of patients in whom relative infecundity is correlated with an existing disease condition. The patients studied can be divided broadly into three major groups. The first group consisted of persons in whom a definite endocrine condition had been evaluated by a comprehensive diagnostic study, while the second were other patients in the same numerical series in whom the diagnostic investigation had both eliminated an endocrinopathy and demonstrated an existing pathologic condition of nonendocrine etiology. The third group, selected for control, was a consecutive series of 250 healthy women, all pregnant, drawn from a prenatal service. It appears that endocrine disorders do not result in a decreased number of marriages. The percentage of sterile marriages is highest in those showing ovarian disease, next highest in thyroid, and lowest in pituitary disorders. In the nonendocrine group studied, infertility was definitely less frequent than among those having endocrine disease. Even with the nonendocrine group the incidence of infertility is double that usually regarded as normal for the community.

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EDITORIALS

CONSULT A MEDICAL MAN FOR IMPAIRED VISION

Many serious organic disorders are discovered first by the ophthalmologist when he makes a comprehensive eye examination. Bright's disease and diabetes frequently are revealed in their earlier stages through a careful ophthalmoscopic examination and at a time when such conditions may be relieved. Glaucoma is one of the many dreaded eye diseases which undetected may result in total blindness, and yet it comes on insidiously without pain or external manifestations. It is detected by a competent ophthalmologist. Inasmuch as there is a definite relationship between the eyes and other organs of the body it is of the utmost importance that impaired vision or eye discomfort should receive the skilled attention of a trained ophthalmologist rather than that of any sort of a spectacle fitter who has had no medical training. As an example of what can happen we mention the following incidence: A farmer who was losing his vision, and without discomfort or external signs of inflammation, was referred by his family physician to an optician who upon finding that no glasses improved the vision advised the farmer that he was getting a cataract and that after he became blind the cataract could be removed and vision restored. The farmer went blind all right enough, but he went blind from simple, chronic glaucoma which probably could have been checked had he been under the care of a competent medical eye specialist. In another instance a woman was told by an optician that she had a cataract developing and that her vision could not be improved with glasses. Several months later she consulted a medical eye specialist who discovered a well-advanced nephritic retinitis which would have been discovered earlier and proper treatment advised had someone other than a spectacle fitter seen the case in the beginning. It is not a question of "stubbing a sore toe" which brings about this criticism, but rather a desire to point out to physicians the dangers of recommending their patrons to see lay spectacle fitters when the vision begins to fail. It may be that very simple, corrective lenses are all that are required for failing vision, but that fact is not trustworthily deter-

mined until after the eye has been examined both without and within by competent eye specialists.

MEDICAL FACILITIES IN SHELBY COUNTY

WELL, Shelby County, Indiana, is now in the limelight through the publication by the National Committee on the Cost of Medical Care, of a survey of the medical facilities of the county. The report embodies over 200 pages, and goes into considerable detail concerning the medical facilities of Shelby county as obtained largely by personal interviews and observations started about the middle of June, 1929, and finished at the end of August. The survey includes detailed information concerning the private practice of physicians, dentists, nurses, and other individuals, and the work of all types of medical and public health agencies.

Among the interesting features of the report we note that there are thirty-one physicians in Shelby county, seventeen of whom, including one woman, are in Shelbyville. Eight Shelbyville physicians refer patients suffering from muscular defects, stiff joints, constipation, rheumatism, and in the case of one doctor neurasthenia, to the local osteopath. Most of the physicians in Shelby county dispense their own medicine, the exceptions being five Shelbyville physicians, of whom four are partial or complete specialists. The physicians usually dispense the more common forms of medicine in pills and powders. They write prescriptions for expensive medicines, for those rarely used, for those temporarily out of stock, and for ointments which require some time to compound. Sometimes prescriptions are written when the physician has doubts concerning the ability and willingness of the patient to pay.

Concerning laboratory work the report says that eight physicians do chemical and microscopical urinalyses, five do blood counts, three make hemoglobin estimations, two make blood sugar estimations, one examines for blood urea, and four make smears other than blood. Two doctors in the county say that they do no laboratory work at all. A local clinic is equipped for all chemical, pathological, bacteriological and serological work except Wassermann tests, and the Indiana State Board of Health made 342 Wassermans during a period of eighteen months. The largest number of working hours during the normal week reported by a physician was ninety-eight hours, or an average of fourteen hours per day, seven days per week. Eleven physicians report working more than seventy hours per week, an average of ten hours per day for seven days a week. Nine physicians work fifty hours or less a week. Four of the Shelbyville physicians reported 200 or more office calls, and one physician reported 300 office calls per week.

The medical profession of Shelby county is reported to have made no revision of the fee

schedule since 1856, though the ordinary home visit in town covered by a fee of one dollar in 1856 calls for a fee of two dollars now in Shelbyville, although it is \$1.50 for the rest of the county. Two physicians still charge the same rate for a home call that was charged seventy years ago. The rate of fifty cents per mile has not been changed. The obstetrical fee, on the other hand, has increased from five dollars to twenty-five dollars in Shelbyville, but the report says that the statement can be made safely that the charges of doctors in Shelby county for home visits, including mileage and probably office visits, have not kept pace with the change in the purchasing power of money. Two Shelbyville physicians charge as little as three dollars for a five-mile visit, and only one or two Shelbyville physicians hold strictly to the rate of fifty cents per mile, and the rest reduce the charge as the mileage increases. All Shelbyville doctors who practice obstetrics report that as a general rule they charge twenty-five dollars, but there are some variations. The surgical fees usually depend upon the ability of the patient to pay. A small number of physicians in Shelbyville, in caring for poor people, prefer to make some charge, however small, for the service rendered, as they think that the method prevents people from getting used to receiving charity services and also makes the patient feel better. Nearly all of the physicians do a considerable amount of free work, irrespective of the fact that there is legal provision for the care of indigent patients by township funds.

Concerning the collection of fees some of the older men make little attempt to collect their accounts, and one physician has a cash price and a carrying price, with twenty percent difference between them. He claims to have not lost over eight hundred dollars in all his practice. Some of the physicians claim that country patients meet their bills more satisfactorily than patients residing in Shelbyville or the towns of the county. An interesting fact, as published, is the statement that the total *net* income for thirty physicians in one year was \$102,564, or about fifty-nine percent of the total gross income. Half of the net incomes were less than and half more than \$3,066. The table showing net incomes of the physicians of the county is interesting, and briefly is as follows: Five physicians have *net* incomes between \$500 and \$1,500; seven, between \$1,500 and \$3,500; six, between \$2,500 and \$3,500; three, between \$3,500 and \$4,500; six, between \$4,500 and \$5,500; two, between \$6,500 and \$7,500; and one, above \$10,500. The net income of each physician was computed by deducting from the gross income office rent, automobile expenses, the amount spent for drugs and several other specified items.

The survey also includes dentists, only three of whom have an income of over \$3,500 per year; nurses who earn from \$800 to \$1,000 per year, the latter amount being the amount earned by one of the practical nurses. The osteopaths and

chiropractors have net incomes ranging from \$650 to \$5,200, and the Christian Scientists were unwilling to give data concerning income.

The druggists are credited with doing little prescription work, and as in many other places are merchants dealing in ice cream, soda water, luncheons, sundries of every description, and patent medicines. There also are about thirty grocery stores in Shelby county that sell medicine, including all the well-known and well-advertised proprietary preparations. One grocery store sold over \$2,000 worth of medicine in one year. A summary of the work of the hospitals and public health agencies, and a general analysis of all of the factors considered, concludes the book.

The investigator concludes by saying that "many problems are raised which are far from easy of solution and only by an intelligent consideration of the problem as a whole can wasteful expenditure be eliminated and the best returns obtained for the money spent not only in Shelby county but in any other community. To induce each person to make his medical expenditures on the basis of what is the best scientific knowledge at the time is one phase of the problem. To provide the best and most economical service available—that is the other phase. It is difficult to choose among the many solutions that may be offered. The issues are concerned with the whole question of economics in every community in the United States. The structure and organization of communal life in the United States is one that is altering rapidly. Medical science and institutions are changing and will continue to change. Wise social policy requires that the changes be controlled so that the best values of the old order will be retained and not lost from sight in the development of the new."

TREAT THE PATIENT AS WELL AS HIS ILLNESS

With all of the hue and cry concerning the high cost of medical care and the effort being put forth by well-intentioned people to saddle socialistic medicine upon us, it is a good thing for us to ask if there is not something wrong with the medical profession. We have been following in a groove for many years and the question arises as to the necessity of getting out of the groove if we are to avoid the fate that is in store for us unless we change some of our practices and standards.

As medical men we are too individualistic and too prone to look to our individual welfare and neglect taking any part in a community interest that is so vital to our future progress and economical position. We encourage all sorts of extravagances and unnecessary attention in connection with the services we render, until the public rebels at the burden. Much of our attitude in this direction is due entirely to our own selfishness and desire to make things easier for ourselves, though

in doing this we add to the burdens of the public without really increasing the trustworthiness or value of the necessary services we are rendering.

We lack unity of purpose and constructiveness in our own interests as well as in the interests of the public when we neglect to provide for the care of the major portion of the people not only in a creditable professional manner but at a cost to the public which can be borne by the public without hardship and great inconvenience. We have added to the burdens of the public without showing any appreciable effort to share some of those burdens ourselves and thus make our position of confidence on the part of the public more secure without loss to ourselves.

It also is true that we have made wonderful advances in the diagnosis and treatment of disease, but most of us have made the inexcusable mistake of treating the disease and giving little attention to the patient himself. Our clinics and our hospitals are weaning us away from the humanizing factor in the practice of medicine. We are becoming too impersonal and mechanical in our contact with patients, and we are not sympathetic or considerate enough with the mental or psychologic condition of our patients. We tell our patients that they have a leaky heart or tuberculosis, and then utterly fail to create in the patient's mind a feeling of optimism concerning the future by telling him that his affliction does not necessarily prevent him from engaging in any gainful occupation, or along safe lines to enjoy many of the things that make life worth living. We frequently dismiss patients with emotional disturbances and the imaginary complaints that harass certain persons when they should have sympathetic consideration and advice. In short we are losing rapidly our fundamental interest in humanity, with the result that the patent medicine vendors, the medical pretenders, and the cultists of every type are filling the gap, for their stock in trade is optimism and friendly sympathy. Many of those who fall into the nets of the cultists and the quacks have been willing and many of them able financially to undergo thorough examinations in order to arrive at a correct diagnosis of insignificant or imaginary troubles which all too frequently have received superficial attention and the patient told that there is nothing the matter with him. It is not necessary to be tricky or dishonest in the practice of medicine, but it is necessary to consider every patient coming to us as having something the matter with him, be it emotional or definitely pathologic, as requiring our careful and conscientious consideration and advice. A sympathetic and considerate attitude of a physician, coupled perhaps with therapy for a very insignificant pathologic condition, often results in a cure of what to the patient seems to be a very serious ailment. The human element plus a spirit of optimism duly transmitted to the patient is what spells success for nine out of ten quacks who pretend to and often do cure all sorts

of imaginary ailments that could and should be cured by educated and well-trained members of the medical profession.

A great many people are having unnecessary operations, and in one sense we ought to frown upon the altogether too common exploratory operation, and it is a very justified criticism that too many operations are performed without sufficient examination and analysis of conditions presented. One of our greatest problems is to make sure of our diagnosis, and differentiating between emotional or psychic disturbances and real morbid pathology. The public has grown to believe that the only thing that physicians want to do is to operate, and sometimes we think that the public is quite correct in that assumption. Certainly it is that when physicians are looking constantly for surgical cases because they are profiting by doing the surgery themselves, or are unduly profiting when others do it, they are open to distrust and criticism, for under such circumstances the patient's real welfare is being neglected.

We need at the present time more than anything else to get back to first principles as followed by our forefathers in the practice of medicine, and that is to work for a restoration of confidence in us by taking a real interest in patients themselves as well as in their complaints. In other words, it is up to us to treat the patient himself as well as his illness.

INSTRUCTIONAL COURSES

For one reason or another postgraduate work in Indiana has not been considered seriously or indulged in to any considerable extent, and yet there are many reasons why the rank and file of the medical profession of the state should be interested in the subject. We have stiffened the courses for the undergraduate student, and in addition required him to serve an internship in an accredited hospital, but we have left him to follow his own initiative and inclination after he receives his license to practice medicine. A few of these physicians through natural bent not only continue as students, through independent study carried on by reading current medical journals and up-to-date medical books, but they also grasp at every opportunity for further advancement by doing postgraduate work in colleges or hospitals. In some states, and spasmodically here in Indiana, postgraduate instruction has been taken right to the door of the physician as a direct result of the enterprise of individuals or societies, but not enough of this work has been carried on in Indiana, or for that matter in the other states. Many of our medical societies, with commendable enterprise, have furnished their members with programs that in a sense may be considered postgraduate in effect, but such programs have lacked many of the essentials that go to make up a finished product.

For several years we have watched the progress and results of a system of instructional courses given at the annual sessions of the American Academy of Ophthalmology and Otolaryngology. This Association, the largest of its kind in the world, has a membership composed entirely of eye, ear, nose and throat specialists, and admission to membership is not effected by any who have not been in special practice for a number of years and who have not secured through examination the certificate awarded by special boards of examination. The membership, therefore, is representative of progressive and well-trained specialists. In addition to the regular papers and discussions presented at any of the annual sessions of the Association which last throughout an entire week, the Association several years ago put into effect a plan whereby instructional courses are offered at the minimum charge of one dollar for each course, and these courses are given not only by prominent clinicians and teachers but the subjects are assigned to those who seem to be peculiarly fitted to offer instruction in the subject assigned. Each course is an hour in length, perhaps repeated several times throughout the week, and attendance is limited to twenty or twenty-five at the most. The courses may cover some phase of surgery, therapeutics, physiology, or in fact anything pertaining to the theory and practice of one of the specialties, and is supposed to embrace the latest approved knowledge on the subject. Perhaps thirty-five or forty courses, all different, will be given at any one session, and the popularity of these courses is attested by the fact that before the first day of the session all tickets for the special courses are sold. The money received from the instructional courses goes into the general treasury of the Association, but is used largely in paying the actual expenses of the courses which in some instances are large, for everything necessary in the way of facilities or equipment are provided in order to make the courses interesting and of exceptional value.

The thought has occurred to us, Why shouldn't our Indiana State Medical Association adopt a similar plan and introduce instructional courses at our annual sessions? Following the plan of the American Academy of Ophthalmology and Otolaryngology they could be given in the forenoons throughout the session, and the regular program of papers and addresses could be given in the afternoon. The courses could be given by those in our own state who are capable of giving them, or some of them could be given by outsiders. We are not so sure but that the Indiana University School of Medicine would be in sympathy with a move of this kind and approve a plan whereby the teachers in the University could help out in giving the courses.

This suggestion is offered in the hope that it may receive some consideration, and wholly with the idea of improving the character of work done at the annual sessions of our State Medical Asso-

ciation and aiding the membership in keeping abreast of the times. It would in a sense be a postgraduate course taken right to the members of the Association at insignificant expense, and perhaps with some pecuniary profit to the Association though the latter should be a minor consideration. Our suggestion perhaps may be deemed worthy of consideration by the Council and officers at the coming Council meeting in December. It is offered with that idea in mind.

INVESTIGATION OF COST OF MEDICAL CARE

THE Committee on the Cost of Medical Care has been organized to study the economic aspects of the prevention and care of sickness, including the adequacy, availability and compensation of the persons and agencies concerned. The committee has sent out a number of bulletins containing detailed information as to what has been done and furnishing data from which conclusions may be drawn. Judging from the reports already made we are inclined to believe that the committee will come to one conclusion, and that is that for the great mass of our population, if served by individual practitioners of medicine, the service, generally speaking, is inadequate and lacking in that standard of quality which should prevail. The showing made by industrial organizations that provide complete medical service for its workers, as in the case of the Endicott-Johnson Corporation, which provides complete medical service for its 15,000 employees and their dependents, compares very favorably with private practice in the community, though competition among the medical men probably plays a large part in the results. It is entirely probable that a survey of similar work done by other corporations will show equally favorable results. We shall not be surprised if, in the final analysis, the committee does not approve some sort of plan whereby every community will be provided with complete medical service at a minimum cost, which in the end means the practice of medicine under corporate, municipal, state or federal control. This would mean doing away with private practice and placing every medical man in a salaried position. At first glance the plan may look good and worthy of development, and yet we doubt the value of the ultimate results unless some account is taken of personal initiative and suitable awards for the development that goes with initiative. We do not believe that a small salaried position ever will be attractive to the majority of the American physicians, dependent as it might be upon many other things than real ability, nor do we think that on the whole the American people will be satisfied with machine medicine or that type of medical service which, in a large measure, lacks that personal element and human interest which so largely prevails in the private practice of medicine. However, this country is flirting with many economic

changes and perhaps will not be satisfied until it does away, to a very large extent, with the private practice of medicine. As we see it, little can be done to stop the drift of the times, and yet if the medical profession as a profession awakens to the danger that threatens it may be possible to so divert the course of events that the harm done to the individual practitioner of medicine will be lessened. In reality what should have been done long ago, as proposed by some of the leaders of our profession, was to put into effect a program whereby complete medical service could be given to all the people all the time, instead of waiting for lay organizations, municipalities, states and even the federal government to do the work for us.

MEDICAL SOCIALISM

In an article on "Medical Socialism Promotes Wholesale Malingering," which appears in the *Journal of the A. M. A.* for September 6, 1930, attention is called to the fact that all socialistic attempts to make the community do what individuals should do for themselves have proved failures. National health insurance is a gigantic scheme of medical socialism. Unnecessary claims steadily increase in those countries where health insurance prevails. Selection of physicians depends only slightly upon professional capacity and almost entirely on willingness to accede to demands. The one who will deal out prescriptions and fill in certificates without question is popular. Thus the panel system in England has undermined the morale of the people, reduced physicians to positions less lucrative than those of the average laborer, and increased taxation of the people. In Germany, the pioneer of medical socialism, medical insurance has promoted wholesale malingering to obtain incapacity payment. Conditions in Austria are deplorable. Guided by these unfortunate experiences with medical socialism in other countries, New Zealand both by profession and public, opposes medical insurance. A leading journal says: "It is not that great bureaucracies grow up and hatch on such schemes, but that the so-called beneficiaries are debauched mildly, losing self-reliance and independence."

God forbid that the United States ever adopts any phase of socialistic medicine! We already have enough people who are made leeches upon the public purse through benefactions without increasing the number through unearned gratuities by way of free medical service at public expense. Already we are headed toward state medicine through an increasing amount of free service rendered by our boards of health, our state hospitals, our free clinics, and the benefactions provided by misguided philanthropists. Where will we end if we continue to encourage pauperism and dependency? Are we going to help encourage the growing sentiment among a lot of people that the world not only owes them a living but all the luxuries

that are afforded in this progressive age? Medical men must consider this matter seriously, for it means more to them than anyone else when we are considering the rendering of professional service.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely free to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve you.

THE week of May 11, 1931, has been decided upon for the next annual session of the American Medical Association to be held in Philadelphia. A delightful time to be in Philadelphia, neither too hot nor too cold as a usual thing.

SEVERAL of the state medical societies are furnishing group medical insurance for their members. This is an idea worth investigating by the Indiana State Medical Association and we shall say more on the subject after obtaining comprehensive information.

THAT motorists should carry first aid material is the suggestion of the October number of *Hygeia*. It is worthy of serious consideration for, as is pointed out, never in the history of our country have so many Americans been distributed unconscious, semi-conscious or suffering with pain along the roadside. A first-aid kit may be a lifesaver, but in any event is a valuable accessory when touring.

THE Mayo Brothers, of Rochester, Minnesota, publicly announce that they have amassed a fortune of thirteen million dollars from their famous clinic, and that the entire amount will go to the Mayo Foundation for Medical Education and Research. We are pleased to know that someone has made the practice of medicine pay. It is evident that good business acumen has been coupled with good professional service.

It is unfortunate that several lay magazines of very large circulation are careless in selecting supposedly scientific articles for publication and fail to have supposedly scientific contributions passed upon by someone who really knows. Thus, the *Ladies' Home Journal*, the *Delineator*, and a few lay periodicals of lesser circulation and prestige have been guilty of publishing allegedly sci-

entific contributions that from the standpoint of those who really know must be considered thoroughly untrustworthy.

IN the future the American Medical Association will pay all the expenses of entertainment at annual sessions, and, as a resolution states, "the only obligation that shall rest on the local profession of any city in which the Association holds its annual sessions shall be to render such assistance through proper committees or individuals as will enable the trustees and other officers to provide suitable hotel accommodations, meeting places, exhibit space, and local information."

"It is fundamentally and governmentally wrong and decidedly un-American for any group of individuals or an organization to place before our people enticements which tend to pauperize and encourage dependents instead of independents as inaugurated in the declaration of our forefathers. It follows, therefore, that free clinics and social agencies are undermining the spirit of true Americanism and are breeding socialistic tendencies."—BROOK, presidential address before the Michigan State Medical Society.

WE certainly take off our hats to several of the large life insurance companies that are sending out millions of bulletins and pamphlets giving trustworthy information concerning individual and community health. The many pamphlets that we have seen show evidence of having been prepared with a rare degree of intelligence and reliability. Furthermore, the sound advice is given that people who are wise will not trifle with patent medicines, bizarre methods of treatment, or repose confidence in quacks or charlatans, but consult reputable, regular physicians.

WHAT is the matter with a county medical society when it permits one of its members to exploit himself in the newspapers in a very objectionable way? In one of the counties of Indiana a certain physician has his name in the local paper from two to six times each week. Inasmuch as the names of none of the other physicians appear in the local paper it is a foregone conclusion that the doctor in question is seeking and receives a lot of free advertising for which he deserves censure. The county medical society ought to take some disciplinary action.

WE recently were approached by a salesman and asked to buy when about the most important argument advanced was that the product had received the open endorsement of a large number of prominent physicians. Ever since several thousand physicians made monkeys of themselves by endorsing Lucky Strike cigarettes, and W. A. Pusey, an ex-president of the A. M. A., lowered his dignity by publicly endorsing a proprietary

soap, we have begun to think that as a general thing the endorsement of physicians should not be considered as having much weight.

WE still hear reverberations from the Fort Wayne session, which has been pronounced by many the best ever held. We hope that these favorable comments do not arise as a result of crowding so much work into two days. To our notion the members would be better satisfied if they took things more leisurely. We also are firmly of the opinion that fewer papers and more discussion will please the average physician better than so many papers and little or no discussion. We hope that next year the last day will be the best day of all, and one that no one can afford to miss.

NOT satisfied with the iniquitous dole system, England now is flirting with a still more objectionable socialistic offering known as the "Public Medical Service Association." Its purpose is to socialize the medical profession by furnishing free state medical, nursing, institutional and surgical attention to any citizen of any class, *irrespective of pedigree or pocketbook*. That will be a bitter pill for the medical men of England to swallow, but it looks very much as though they, following the example of the Russian physicians, will have to swallow it whether they like it or not. How soon will it be before such a plan will be proposed for the United States?

THE Industrial Commission of Ohio apparently settles bills for medical and surgical services rendered in industrial cases by the short yardstick method, and without consistency or reason. If any physician doubts this let him present a reasonable and fair bill for professional services rendered in an industrial case coming from Ohio, and then note what is done by way of cutting down the compensation. Just how Ohio physicians can stand for such treatment is hard to understand. The Indiana Industrial Commission uses both justice and reason, and seldom if ever does a physician have cause for complaint. That is one compensation for practicing medicine in Indiana.

IT is not out of order to call attention to the fact that the Indiana State Medical Association really has been prospering for several years and has a substantial surplus to which was added nearly \$1,000 as a profit on the recent Fort Wayne session. However, the presence of a surplus does not indicate the advisability of lowering the dues on the one hand or entering into any foolish expenditure of money on the other hand. The truth of the matter is that we never know just when an emergency may arise, and a small surplus will prove very advantageous. The Association is to be commended for the wise business management that has prevailed for a number of years.

PRESIDENT HOOVER has attached his signature to the act establishing the National Institute of Health, and in accordance with the act the Hygienic Laboratory of the Public Health Service, with its long record of accomplishments, is merged into the new institution with well-nigh unlimited opportunity for scientific research. The bill was approved by the American Medical Association and actively supported by practically every organization devoted to the advancement of human welfare, and, as the *Journal of the A. M. A.* for October 18, 1930, well says, "The National Institute of Health may well become a responsible organization in the field of medical research, considering discoveries of untold benefit to man."

DURING the Fort Wayne session of the Indiana State Medical Association a physician in one of the populous communities of the state advised us that the plan to establish a community clinic in his city, to be managed and controlled by the local medical society, fell absolutely flat because of professional jealousies and personal animosities among the local physicians. We think it was *Puck* that carried on the front cover page the inscription, "What fools these mortals be," and we all have laughed at the simpleton who made the remark, "Ain't nature grand?", to which we might add, "Aren't doctors funny?" It is time to pay some attention to the members of the medical profession who either want to run or wreck the medical profession, and do not seem to realize that in the final analysis they are the ones that are worst hurt when they block progress.

WE frequently hear or read of tonsillectomy operations being performed in the home. That is all right if the usual preparation and precautions are taken, but it is all wrong if the patient subsequently is not under the observation of a trained nurse or is some distance from the surgeon who performs the operation. We have heard of several deaths from hemorrhage following tonsillectomies, and in every instance the cases were operated and cared for under conditions which deserve condemnation. In fact the deaths were unnecessary and probably would not have occurred had the cases been given proper consideration. Some day some of these physicians who operate under conditions that are not approved by the medical profession in general will come in for suits for malpractice and damages, and they will get their just desserts if judgment is rendered against them.

QUITE recently we have heard a report to the effect that night-blindness can be cured by prism exercises and that several patients in a family suffering from retinitis pigmentosa or night-blindness have been contributing for several years to the coffers of the one offering such a quackish remedy for what is well known to be incurable. About the same time we learned that one of the Indiana chiropractors is advertising to cure hare-

lip as well as club feet through his individual treatment composed of chiropractic adjustments in connection with "potential electric radiation," and some misguided people are falling for this nonsense. Well, Barnum was right when he said that the American people like to be humbugged. The unfortunate part of it all is that they do nothing to protect themselves and seemingly like it. They even license some of these impostors to impose upon and defraud the public.

THE secretary and general manager of the A. M. A. says: "In my opinion the best thing the Woman's Auxiliary can attempt to do at the present time is to exercise some supervision and control over the programs of women's clubs. The faddists and quacks seem to have comparatively little difficulty in securing places on such programs and the women of the country are being fed all sorts of silly stuff that is designed to further the programs of self-seeking persons and to disseminate misleading and pernicious propaganda. I think that if the Woman's Auxiliary would make this one thing the outstanding purpose of their labors for two or three years, and see to it that the program committees of women's clubs have assigned to their membership somebody who will scrutinize carefully tentative programs and prevent the appearance of quacks and faddists before the clubs, they will do a splendid work."

EVERY person should have a physical examination on his birthday, was the suggestion made a few years ago, and medical journals started a grand ballyhoo with a view to interesting medical men in making these physical examinations. The American Medical Association prepared a pamphlet giving detailed instructions on how the work should be done, and physicians everywhere were urged to recommend examinations to their patrons, not alone because of the value of the procedure from a preventive medicine standpoint but because it offered a fair way for every medical man to increase his income. Well, the whole thing seems to have died abornin' and now we hear little about the periodic health examination, and the pity of it all is that not only does the public but the medical profession suffer in consequence. Our apathy and indifference to the whole subject is disgraceful, and as a profession we should be ashamed of our attitude.

OUR attention has been called to an address delivered before the Oklahoma State Medical Association in May of this year which gives some excellent advice to general physicians concerning "some don'ts in eye, ear, nose and throat work." We particularly call attention to the advice, "Don't give patients cocaine solution to use in their eyes at home." The effect of cocaine is evanescent and it has no therapeutic action of any kind whatsoever. In fact, it disturbs the nutrition of the cornea and is positively detrimental except when

used in the right place as an anesthetic for the removal of foreign bodies from the eye or for other operative work. There is absolutely no condition of the eyes which justifies the prescribing of cocaine for home use. If the scratching or pain is so severe that it is not controlled by hot compresses and occlusion of the eye, then an opiate may be employed to give the patient comfort, but never cocaine.

FRANCE is complaining of an over-supply of physicians, and a circular letter has been sent to teachers, parents, and pupils of the senior classes in the colleges calling attention to the disappointments that are in store for those who decide to enter the profession of medicine. The number of physicians has almost doubled within the past thirty years, whereas the number of inhabitants has increased only two millions in the same time. The letter goes on to say that the surplus of physicians presents grave dangers for the medical profession, for already the present financial rewards of the established physicians are much lower than those offered by any of the other professions. The physician's income is diminished still further by the taxes and charges of various kinds with which he is burdened.

As we glance over the full-page advertising of the Public Health Institute of Chicago we cannot help believing that the medical profession of any community, collectively and individually, could wield a powerful influence in individual and community health matters through judicious and trustworthy advertising. The greatest difficulty, as we see it, is to keep the advertising free from those objectionable features which we see so frequently in connection with the advertising of the quacks and medical pretenders. We believe that the public would be better able to act intelligently in seeking relief from human ills and in the selection of trustworthy physicians if it were furnished some such accredited instruction and advice as can be given by the reputable medical profession in any populous community. Of necessity the advertising should be free from personalities and exploitation of individuals.

SOME of the Indianapolis physicians are complaining about the service and charges of the headquarters hotel at the time of the Fort Wayne session. No apologies are in order, for the complaint probably is well founded, but while we are on the subject we would like to ask if there is any hotel in the state of Indiana that does not give relatively poor service when trying to entertain a convention, and isn't that particularly true in Indianapolis where we believe we have encountered, on more than one occasion, a fine example of poor service and exorbitant charges, and the experience was not alone when Indianapolis was trying to entertain a convention. However, on the whole Indiana probably takes care of visitors at

its hotels about as well as most of the other states of the Union, and it is only at all-year resorts where excellent service and fair charges are necessary in order to hold patronage that real satisfaction is experienced.

SPEAKING in the interest of the family of average means, overburdened with unnecessary bills from physicians and hospitals when overtaken by sickness, a leading surgeon at the recent session of the College of Surgeons made the astounding and treasonable statement that a large part of the surgical work now done in hospitals could be done just as effectively, safely and well in the average home if the surgeon is willing to devote a little time to preparation and considerable time and care upon his technique. This will bring a shudder to the physician who thinks he cannot open a boil unless his patient is in the hospital and the operation is performed in a well-equipped operating room, enjoying all the pose as well as the unnecessary expense that goes with unnecessary hospitalization. What are we coming to when surgeons begin to help their patients to save money by steering clear of unnecessary and expensive attention in connection with illness?

SET a woman to catch a woman! Nine years ago Professor Anne Louise McIlroy of the Royal Free Hospital for Women gave evidence in a court of law that the contraceptive pessary recommended by Dr. Marie Stopes was a singularly ineffective as well as harmful device. Dr. Stopes has never forgotten this. Recently she heard that her detractor (or the detractor of her pet pessary which, after all, is just as bad) was actually prescribing this same instrument in her own practice. Did Dr. Stopes thereupon write a polite letter to the professor to glean the reason for her change of heart? No, she had a more ingenious plan. Disguising herself at great pains as "a work-grimed charwoman" she applied on the correct day at the out-patient department and was supplied and fitted with one of the disputable pessaries by none other than the professor herself. The details of this successful *coup d'état* are described on the front pages of the *Birth Control News* by Dr. Marie Stopes.—*Colorado Medicine*, October, 1930.

THE *Radium Digest* for October offers the following precautions for the use of radium:

1. Don't use radium on a cachectic patient, nor a markedly anemic one.
2. Don't use radium in infected tissues.
3. Don't place radium nearer than 0.5 cm. to bone, nerve trunk, blood vessel of size, or in the thin wall of a hollow viscus.
4. Don't use radium on patients with white blood counts below 5000.
5. Don't use radium on patients suffering from generally debilitating diseases, viz., diabetes, nephritis, myocarditis, etc.

6. Don't use radium on patients who have had unknown amounts of radiation.

7. Don't fail to attach radium tubes to external parts of the body by means of a cord or wire.

8. Don't use radium excessively; thereby producing widespread necrosis.

9. Don't use radium on a patient with a fever.

10. Don't handle radium with the fingers.

It is unfortunate that a lay periodical like the *Ladies' Home Journal* should every once in a while publish an article purporting to contain valuable scientific information that in reality is untrustworthy in its findings and recommendations. The trouble lies in the carelessness with which writers are selected. If a little more effort were put forth to determine the standing and reliability of the one who presumes to speak, there would be less tendency to quote misleading information. Thus in a recent article appearing in the *Ladies' Home Journal* a writer who is not qualified to speak authoritatively makes the unconfirmed statement that ephedrine is a habit-forming drug and therefore is as dangerous as any of the narcotics in the opium group, and in consequence habit-forming and deadly. There really is no evidence to prove the assertion made, and it is unfortunate that a prominent lay periodical should be so careless in the selection of material to be published and widely read.

It is regretted that the A. M. A. at the Detroit session did not accept the recommendations offered by two of the Sections of the Association concerning requirements for an automobile driver's license, so that the matter could be referred to the various states for appropriate action. As a matter of fact the disagreement arose through the attempt to make the requirements too rigid. As a starter it would be sufficient to grant driver's licenses to those who are able-bodied as to legs or arms, have adequate mentality, and vision of at least 20/50 in one eye and 20/100 in the other eye either with or without glasses. In view of the steadily mounting death rate from motor vehicle accidents the adoption by all of the states of regulations requiring the licensing of motor vehicle operators on the basis of examination designed to reveal the applicant's physical and mental capacity to operate such a vehicle safely seems imperative. How splendid it would be if the Indiana legislature, which will convene next January, would pass a good motor vehicle driver's license law.

SOME years ago the editor of THE JOURNAL walked out of a haberdashery store without making the intended purchase, and all because the proprietor and two clerks were too busy listening to and enjoying a story by a traveling salesman which seemed to them to be of more importance than giving attention to a prospective customer. Not long afterward the tables were turned and a prominent business man left the office while

the editor of THE JOURNAL was carrying on a social conversation with a casual visitor who was not a patient. The business man never came back, as promised, though his initial visit was made for the purpose of receiving professional attention. It was a good lesson, and one that should be taught to many physicians who are too careless in giving prompt attention to patients, some of whom may be business men whose time is very valuable. A business-like management of office hours, with prompt attention to everyone, the busy business man as well as the idle invalid with time to spare, adds to the physician's reputation for service and efficiency.

THE editor of the *Pennsylvania Medical Journal* says, in the May issue, that Job may have been a model of patience, but Job never edited a medical journal or he wouldn't have established a reputation for patience. The average reader of a medical journal has no conception of the amount of time, labor, thought, executive ability and patience required on the part of any editor, and especially the editor of a medical journal. There not only is the eternal work and discrimination in getting up copy, but there is the incessant squabble with typesetters, printers, and binders, the drudgery of proof reading which takes precedence over all other work, and last but not least the contentions of the grumblers and fault-finders who think that little time or effort is needed to produce a good medical journal, and believe that most anyone could do the job. Our sympathy goes out to our fellow-editor, for even long experience at the game does not warrant us in saying that being an editor is an easy job, even though one does the work uncomplainingly and with a certain amount of pleasure.

A CASE of acute pneumococcus endocarditis following extraction of teeth is reported by Kapsinow in *The Journal of the A. M. A.* for August 9, 1930. The case is of extreme interest, as the author says, because of the fact that the patient, who had been entirely well and so far as one could determine free from any cardiac symptoms, suddenly developed acute pneumococcus endocarditis following the extraction of teeth. Although serious complications following extraction of teeth seem to be quite rare, so far as reports in the literature are concerned, they probably are more common than we think. The promiscuous removal of large numbers of teeth and the demand to clear up focal infection is certainly not without its dangers. The fact that in this patient cultures from a tooth socket showed pneumococcus and streptococcus hemolyticus would seem to indicate that before a radical removal of teeth is undertaken the patient should have a thorough and extensive cleansing of the mouth over a period of several days. Another precaution would be to have the patient's general condition ascertained by his physician.

At the Fort Wayne session of our Association it was rumored that a garrulous and opinionated physician, who for many years was on the borderline of quackery, announced that he would like to be president of the Indiana State Medical Association, but temporarily would be satisfied if elected a delegate to the A. M. A. Every once in a while some physician without qualifications and not deserving preference bobs up with an itching for some prominence among medical men and runs for office, and occasionally, in an unguarded moment, such an undeserving one is elected. Perhaps physicians are no worse than those who follow other vocations, but it really is a pity that when it comes to representation we ever are deluded into electing unqualified men to representative positions. For the most part the Indiana State Medical Association in its elective offices has been represented by men who are deserving of the honors through exhibitions of ability, loyal service to the Association, and adherence to the best ethics and traditions of the profession. Let us hope that we continue the practice.

MANY highly educated and well-trained physicians have failed to make a success of the practice of medicine, and all because of lack of personality. Many men of meager attainments have built up large and lucrative practices because of a winning personality, a spirit of optimism conveyed to the patient, and a reputation for square dealing. Human nature is much alike in appreciating good nature, reasonable optimism and a sense of honesty and fair dealing. The world in general does not like a grouch, a cynic, or one that is unscrupulous, and the exercise of any one of these undesirable traits is sufficient to spell disaster for the most highly educated, well-trained and experienced physician. This thought is stimulated by study of some successes and failures in the practice of medicine, where personal relationship and the human element enters more largely into the work. People expect service from their physicians, but they also expect more in the way of an ingratiating smile, sympathetic interest, and reasonable optimism. How many of us are filling the position acceptably to ourselves as well as the patient?

THE popularity of the hospital as a place for the average woman to have her baby is easily explained by a comparison of notes by two mothers who had uncomplicated deliveries and both were cared for by the same obstetrician. The one was in a hospital and the other in her own home. One mother had a small room in a general hospital for ten days and paid a total amount of sixty dollars, which included the usual charges for the delivery room, laboratory service, dressings, and care of the baby. On account of the financial circumstances of the patient the obstetrician's fee was but twenty-five dollars, making a total of eighty-five dollars for the ten-day serv-

ice. The woman who had her baby at home had a nurse for ten days, costing fifty dollars, a maid of all work for two weeks, costing twenty-four dollars, a bill for dressings, drugs and baby food amounting to \$8.50, and an obstetrician's fee for service in the home of fifty dollars, making a total cost of \$142.50. As the woman who had her baby in the home afterward said, "If I have to do it over again I will go to a hospital even if it costs twice as much."

WE confess that we have been of the opinion that the Woman's Auxiliary of the Indiana State Medical Association has been interested too largely in social activities and scrambling for office, and we have suggested that the Auxiliary would meet with a warmer welcome and more active support on the part of the Association if it adopted and carried out a constructive program. The challenge was met by a request on the part of the officers of the Auxiliary to outline a constructive program and, at a breakfast meeting of the Auxiliary held during the Fort Wayne session the editor of *THE JOURNAL* called attention to some of the constructive things that could be done, a skeleton outline of which will be found reproduced in the department devoted to the proceedings of the various medical organizations. We are convinced that the Woman's Auxiliary can be made a very valuable aid in promoting all of the worthwhile things pertaining to the economic side of the practice of medicine and to individual and community health in which the medical profession is interested. In fact, we are of the opinion that the wives of physicians have an opportunity of doing more constructive work than can be carried on by women representing any other group or vocation.

WE desire to call the attention of our readers to an action taken by the Bureau of Publicity of the Indiana State Medical Association concerning the publication of scientific papers in the public press before they are published in a scientific journal. In answering a question concerning the matter the Bureau says that "the publishing of medical papers read before medical societies prior to their publication in a medical journal is unethical, unwise and misleading. Publishing of technical topics in newspapers promotes personal publicity in an objectionable manner. Such publication invariably tends to emphasize sensational or supposedly sensational phases of the topic under consideration. Newspapers often are not competent to interpret rightfully medical topics that previously have not been explained and elucidated by medical editors or by physicians thoroughly familiar with the subject presented in the paper. Those things rarely exist which permit publicity in newspapers of a technical subject which previously has not been interpreted by competent medical critics. Conservative advice on matters of public health, especially during epidemics,

occasionally may be permissible but should be as impersonal as possible."

DR. J. P. WOLF, of Evansville, Indiana, is attempting to establish some sort of an institution for the benefit of crippled humanity to which he can leave his estate at death, and he is reported to be a man of considerable means. This purported foundation recently sent circulars over the country soliciting funds through the sale of coupons. According to a bulletin of the Better Business Bureau of Evansville, no organization of the kind has been perfected and no plans have been made that would lead to the establishment of any kind of an institution. Doctor Wolf states that any steps in this direction depend upon the success of the coupon-selling scheme. However, prospective buyers of coupons are warned that only a small percentage of the money paid for coupons will be available for the foundation. For instance, a person receives five coupons, which are supposed to be sold at the regular price of five dollars each. It is pointed out in the letter sent to the prospective customer that fifteen dollars profit is made on a ten-dollar investment. While the Better Business Bureau of Evansville does not accuse Doctor Wolf of any intended fraud, yet by inference the impression is given that people will be wise if they steer clear of the proposition, and in a letter from another business bureau the statement is made to us that the whole thing looks like a "racket." We shall be interested in knowing what the post office department has to say concerning the matter.

Nor long ago we had occasion to remark that Christian Scientists conduct one of the best press agencies in the world, and its influence is far-reaching and effective in suppressing from a very large proportion of the newspapers of this country any news that is at all derogatory to Christian Science. A notable exception among newspapers, most of which are spineless when it comes to discussing any phase of Christian Science inconsistency and deception, is the *New York Times*, which in its issue of October 5, 1930, discusses the unwarranted death of a sixteen-year-old girl who died from appendicitis while under the care of Christian Scientists. Those guilty of the criminal neglect were arrested on charges of manslaughter, and it is hoped that punishment suitable for the crime will be meted out. The *New York Times* calls attention to a similar case which occurred in the same community ten years previously when a man and his wife were charged with manslaughter in connection with the death of their eight-year-old son who died of diphtheria without receiving attention other than that administered by Christian Scientists. The father was found guilty and fined \$1,000, while the court directed acquittal of the mother. It is a travesty of justice when a Christian Scientist escapes suitable punishment when convicted of manslaughter. The

penalty cannot be too severe upon a Christian Scientist guilty of a preventable death, and the crime is all the more heinous when the victim is a child or young adult who has no voice in the matter.

DR. WILLIAM GERRY MORGAN, president of the A. M. A., had some pertinent things to say at the Detroit session concerning economic phases of the practice of medicine, and among some of the trite things expressed are the following, taken from Doctor Morgan's address:

- (1) The physician is no more obligated to provide for the care of the indigent sick than is his fellow citizen.
- (2) In mutual charitable undertakings for the care of the sick each citizen contributes what he has; the layman, physical necessities; the physician professional skill. But each has a right to protect himself from exploitation and to judge of the merits of the recipients of his bounty.
- (3) When a hospital offers its facilities to a mixed clientele, pay, part pay and pauper, the distinction between the sources of those facilities should be clearly recognized. The physical equipment and service is of general public origin and their uses may be sold or given away in the discretion of lay boards; but the professional facilities are, and always must be, the contribution of the medical staff as individuals and cannot become in any sense the property of the institution.
- (4) When a hospital is owned and operated by the Government and supported by taxation, to which medical profession contributes its due proportion, medical attendance should be paid for by taxation, along with all the other facilities supplied by the institution.
- (5) No hospital, instituted and supported by public philanthropy or community cooperation of any kind, should be permitted to increase its revenues and so reduce its financial burden on the public, by any system of collecting fees for medical attendance, and thus engaging in the corporate practice of medicine.
- (6) *The membership of the Association should be guided by these principles in accepting posts on the staff of hospitals, and should refuse to support by the contribution of their services, or by the references of their patients, any institutions violating them.*

HERE is a juicy one concerning fee dividing that has just come to light. Doctor A, a general practitioner in a small town, sends his surgery to Doctor B in a neighboring city, and gets thirty-three and one-third percent commission on all business referred. During a lull in the referring of business by Doctor A, a patient from Doctor A's community independently consulted Doctor B as a surgeon and was operated. Doctor B, presumably with the idea of showing that his heart is in the right place, promptly mailed Doctor A a check which he marked "for cooperative service in Mrs. D's case." Doctor A, tickled pink because he received such a present without working for it, promptly shows the check to one of his confreres and says, "Mrs. D is *not* one of my patients and I never spoke to her in my life." Doctor B's surgical practice seems to be growing as a direct result of *buying* the work, and though he does not hold a reputation of being either skillful or

trustworthy he seems to find enough general physicians trafficking in patients to keep him fairly busy on cases referred at so much per case. There are many people in this world who have elastic consciences, so why should we expect all physicians to play square with themselves as well as their patients?

WELL, the election is over and to satisfy curiosity we would like to know just what effort was put forth by the members of the Indiana State Medical Association to determine the attitude of candidates for our legislature concerning medical affairs. From a rather reliable source we learn that some of the members of pseudo-medical cults secured definite promises from legislative candidates to favor the cults, not only as pertains to the enactment of legislation but the interpretation of legislation in the courts. In this connection perhaps it is just as well to remind our readers that one of the highest courts in the state of Indiana is owned, body and breeches, figuratively speaking, by the pseudo-medical cults, and not only do the cults get a decision in their favor in that court but the representatives of the regular medical profession in more than one instance have not even been given a chance to offer opposition. We certainly are a stupid bunch to pay so little attention to politics or, for that matter, to anything which is of vital interest to us in promoting ethical and trustworthy medical practice. Of what use are the legislative committees of our county medical societies? The medical men of some of the counties in Indiana could have prevented the election of one or two legislators who are known to be opposed to the regular medical profession, but little or no effort was put forth to defeat such objectionable candidates. The chairman of one political party in a certain populous county of the state fairly begged the reputable medical men to take their coats off and help defeat a very objectionable candidate, but since has remarked, "Doctors are such a lot of fools there is no use bothering with them at election time."

ON several occasions we have condemned the practice followed by some physicians of securing their life, accident and indemnity insurance of various kinds from assessment companies or stock companies possessing little capital and not the best reputation for integrity. We desire to reiterate all that we have said concerning this matter and for the reason that there are a number of insurance companies of more or less questionable reputation and limited financial backing that are attempting to sell various types of protective insurance in this state, some of them limiting their business entirely to members of the medical profession. We have received innumerable complaints from physicians concerning insurance swindling games or sharp practices on the part of insurance companies, and we welcome reports throwing light

on a subject that should be of interest to all in the matter of protection. Our advice now, as it always has been, "Do not buy a protective policy of any kind unless the policy is issued by a well-established and well-financed company, that bears a reputation for trustworthiness." Some of the new as well as some of the small companies *may* be worthy of patronage, but we know that many of the new and less well-known companies are *not* worthy of unqualified recommendation, so a physician will be wise if he investigates thoroughly before he puts his name on the dotted line. Don't take the agent's word for trustworthiness of the company he represents but get your information from reliable sources like the Bureau of Investigation of the American Medical Association, or some live wire better business bureau that is in position to give you the facts. If you do investigate you may secure some revelations that will be a surprise to you and cause you to think twice before investing.

WITH the oncoming of winter and the necessity of using anti-freeze solutions in automobile radiators, it is appropriate to call attention to the dangers of toxic effects through the inhalation of even small quantities of certain anti-freeze solutions. Wood alcohol has been the anti-freeze solution of choice for the majority of automobiles, and formerly wood alcohol was produced by the destructive distillation of wood. It is now manufactured from water gas and hydrogen at a cost which makes possible large production at low price. It is marketed under the name of methanol and it is a volatile, cumulative poison. When taken in frequently repeated small doses methanol produces blindness. In larger doses, whether by the stomach or the lungs, it may cause death. The toxic dose is not large and is easily reached, even when the amount absorbed daily is too small to induce a noticeable initial effect. The *Journal of the A. M. A.* of August 30, 1930, says that contrary to the claims that would minimize its dangers, methanol is quite as poisonous when inhaled into the lungs as when taken into the stomach. Erroneous also is the assertion that as the synthetic product is almost pure methanol it is less toxic than the somewhat inferior product obtained by the older method of manufacture. The fact is that in any preparation of methanol, pure or impure, the chief toxic substance is the methanol itself. If, as now seems probable, methanol will be sold widely for use in automobile radiators during the coming winter, and if precautions and warnings in regard to the danger of inhaling its fumes from heated automobile radiators are not instituted, it is highly probable that many cases of blindness will result, and probably, also, fatalities.

ACCORDING to the *New York Times* of October 5, 1930, the health commissioner of the city of New York has sent a letter of resignation to the

New York County Medical Society as a result of intimations that action would be taken against him by the society for alleged violation of ethics in allowing his name and picture to be used in advertisements of a tooth paste. It is said that the medical society is afraid to accept the resignation in view of the opinions of some of the younger men who favor a more liberal attitude concerning medical advertising. Aside from the fact that using the endorsement and picture of the health commissioner of New York in advertising a tooth paste may be considered an act not in good taste, there is to be considered the question of trustworthiness or truth of the endorsement, for it generally is known that most of the endorsements of the kind under consideration are bought and paid for, and, therefore, in reality have no bearing upon the real opinion of the endorser. It is our candid opinion that the New York County Medical Society will not accept the resignation, or for that matter have any investigation of charges preferred against the health commissioner, for there is an old saying that when you live in glass houses you should not throw stones, and if the majority of the physicians in the state of New York are going to tolerate the advertising policy of its official medical journal, which we have reason to believe accepts some objectionable advertising for the profit that it brings, it would be in poor taste to jump onto the city health commissioner because he too presumably lends his support for a price.

FROM the *Bulletin of the Chicago Medical Society* for August 16, 1930, we reproduce the following:

THE COUNTY OF COOK—A MEDICAL PAUPER

The County of Cook pays for food, housing, clothing, drugs, nursing, etc., that it furnishes the indigent of the county at regular rates. It employs all sorts of labor in its charity institutions at wages that are the same as those paid by the private corporations or individuals employing the same classes of labor as the county.

The County of Cook pays nothing to the physicians and surgeons on the staff of the Cook County Hospital even though they are all civil service employees and required to spend at least six hours a week in caring for the patients in the hospital. On August 12th it held civil service examinations for county physicians, field service division. The county offers to pay physicians successful in passing this examination \$1.50 per house call; one-half of the minimum fee for house calls in the fee table of the Chicago Medical Society adopted in 1892 and in 1920. It pays nothing towards the support of the dispensaries to which it refers the ambulatory sick poor, and as a rule the members of the staffs of these dispensaries are not paid.

The attending men at Cook County Hospital should receive at least \$3,000 a year for their services. This would amount to ten dollars per hour six days a week for fifty weeks and would give two weeks' vacation without pay. The county physicians of the Field Service Division should receive at least three dollars per house call, and the county should pay at least two dollars per visit for patients referred to a physician for ordinary office consultation.

The present system is most unfair. Physicians, if they are to live, are obliged to collect from those able to pay for medical services, for services rendered both to those

unable to pay and to those able to pay. Thus fees charged those able to pay are higher than they would be if governmental or philanthropic organizations paid physicians directly for services rendered those unable to pay.

Why should the county of Cook, which is able to pay all other employees at standard rates, ask the members of the medical profession to donate their services *gratis*, or for fifty percent of the minimum fee of the fee table of the Chicago Medical Society?

FROM newspaper reports we learn that Rosenwald, the Chicago philanthropist who has upset the Chicago medical profession as a result of placing medical and surgical services within reach of all at moderate prices, has made a statement before the National Hospital Association to the effect that his plan is intended to do away with so much charity work and discourage dependency. He says that he thinks it is a good deal better for the average person to go somewhere for high-class medical and surgical services and pay a moderate fee for the same than go to charitable institutions where the services are free and the patients are encouraged in the development of dependency if not pauperism. We quite agree with him, and that is exactly why we are in favor of clinics under the management and control of the medical profession rather than under the domination and control of philanthropists who may not be very careful in the acceptance of patrons. We may be mistaken, but we have been led to believe that the Rosenwald plan in a measure is copied after the department store which is responsible for the Rosenwald millions, and that it is merely a question of applying medical and surgical talent on a salary, charging moderate fees for the service rendered, and depending upon systematization and quality of work done to make the enterprise pay—and pay handsomely. The question of charging the well-to-do adequately does not seem to enter into the plan of operation. At present the system seems to work all right, because good men may be secured on part-time service, but what of the developments of the future, with all-time medical service required and the influence upon personal initiative on the part of medical men?

A MAN calling himself "Dr. J. D. Levine," publisher of *The Health Messenger*, has been traveling over the country swindling people through various schemes for the promotion of health. Levine's claim to greatness is his "discovery" that by looking at the eyes of a baby he can foretell a disease from which the child will suffer twenty years later, or by looking at the eyes of an adult he can tell the diseases he or she had some twenty years ago. Hence he claims the title of "iriologist." Levine never attended a medical school although he claims the titles of doctor of chiropractic, doctor of physiotherapy, doctor of spondylotherapy, and many others. His present scheme is to get a class together and teach the diet each classification or type of person should use, and then tell them

to which class or type they belong. The regular price is thirty dollars, but he makes a concession, as a special drawing card, of charging the first suckers fifteen dollars and then raising the price five dollars each time a new class is formed. His price is graduated up to fifty dollars for private instruction, and \$100 for doctors. Levine figured in some exploits in Indianapolis, and quite recently has been driven out of several cities in Texas. The secretary of the Texas State Board of Medical Examiners says, "with proper cooperation on the part of the medical profession we can stop this deluge of quacks who believe they can violate our medical practice acts providing they do not prescribe drugs, and who pose as great discoverers and eminent teachers backed by some non-existent medical foundation such as *The Health Messenger*, a publication issued by J. D. Levine, 162 North State Street, Chicago, Illinois, who was convicted of violation of the medical practice act in Chicago in 1923, or under the auspices of Gilbert Fair's National Health Bureau of Washington, D. C., or the Gilbert Fair Health Foundation of Los Angeles, California, all of which are paper organizations, and in Fair's case the secretary-treasurer and the publicity director are his sons under assumed names."

In the Correspondence Department of this number of *THE JOURNAL* we publish a letter sent to the secretary of the Indiana State Board of Medical Registration and Examination in which the activities of Levine are exposed. We publish the letter with a view to acquainting the Indiana medical profession with the matter so that prompt action may be taken in case Levine returns to Indiana.

THE National Better Business Bureau of New York City has issued a pamphlet concerning the unfair business tactics of the American Tobacco Company in advertising Lucky Strike cigarettes, which, according to a published statement, has been enormously profitable as a direct result of the advertising policy followed. Commenting on this the National Better Business Bureau says, "Lucky Strike advertising has frequently been criticized by prominent authorities acting in the public interest, but criticism of the American Tobacco Company seems to fall on deaf ears since the objective seems to be to earn immediate profit, even though the means used to earn it is in conflict with fair dealing. Its record of unfair dealing is quite convincing." Reference then is made to the alleged recommendation by 20,679 physicians who, it is claimed, made a statement to the effect that the secret toasting process makes Lucky Strike cigarettes less irritating than other cigarettes. As the *Journal of the A. M. A.* well said at the time, "Obviously not one physician in ten thousand is or could be competent to answer this question. Yet the exploiters of Lucky Strike cigarettes have claimed that over 18,000 physicians

answered the question in the affirmative. If this claim is not gravely false it does not redound to the credit of the 18,000." The next bit of hokum was the slogan, "Reach for a Lucky instead of a sweet," and it was claimed that by smoking Lucky Strikes instead of eating sweets, women could retain slender figures and banish overweight. Nothing is further from the truth. Then came the shadows of the fat and slim men, and the fat and slim girls, offered as a prescription for physical improvement. Even the misleading statement that toasting offers throat protection against irritation and cough is another bit of buncombe and perversion of the truth from the fact that the heat treatment in the manufacture of tobacco is about the most commonplace and universally practiced method in the industry. It has long been standard practice. Another bit of buncombe concerns over-eating, and the advertising says, "When tempted to over-eat, reach for a Lucky instead and you will thus avoid over-indulgence in things that cause excessive weight, and by avoiding over-indulgence, maintain a modern, graceful form." The quotations from supposed authorities for the most part are untruthful and misleading. The truth of the matter is that the American Tobacco Company has put into effect advertising practices that do not justify public confidence, and to base an argument on an untenable health appeal justifies severest condemnation. Apropos of the subject of the dependability of indorsements it is worth noting that over 18,000 physicians made monkeys of themselves by indorsing Lucky Strike cigarettes without knowing a thing about the truth or falsity of the indorsement. Incidentally, many medical journals accepted the misleading advertising for Lucky Strike cigarettes, and this journal was offered a full page of Lucky Strike advertising which was promptly refused on the ground that the statements made in the advertising were misleading. It may be, as the president of the American Tobacco Company says, that the kind of advertising that has been used to promote the sale of Lucky Strike cigarettes has been immensely profitable, but we doubt if it long continues to be profitable. In fact, we shall be surprised if the tactics employed do not eventually redound to the discredit of the American Tobacco Company and all its enterprises.

DEATH NOTES

WARREN H. WILLYARD, M.D., of Kokomo, died September 25th, aged sixty-six years. Doctor Willard was a graduate of the Kentucky School of Medicine, Louisville, in 1907.

B. F. EDGINGTON, M.D., of Warren, died September 13th, aged eighty years. Doctor Edgington graduated from the Curtis Physio-Medical Institute, Marion, Indiana, in 1889.

WILLIAM P. TEBAUT, of New Albany, died September 26th, aged sixty-five years. Doctor Tebault was a member of the Floyd County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the College of Physicians and Surgeons, Baltimore, in 1883.

JOHN S. MARTIN, M.D., of Muncie, died October 7th, aged seventy-eight years. Doctor Martin had been in ill health for several months. He was a member of the Delaware-Blackford County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Cleveland University of Medicine and Surgery in 1883.

JOHN P. NICODEMUS, M.D., of Indianapolis, died October 8th, aged forty-seven years. Doctor Nicodemus had been in ill health for some time. He was a member of the Indianapolis Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Indiana Medical College, School of Medicine of Purdue University, in 1906.

JAMES EGBERT, M.D., of Indianapolis, died suddenly October 8th, aged fifty-nine years. Doctor Egbert was a member of the Indianapolis Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from the Medical College of Indiana, Indianapolis, in 1898.

NEWS NOTES AND PERSONALS

DR. DAVID L. FIELD, of Jeffersonville, celebrated his eighty-seventh birthday, October 20th.

DR. JAMES F. BALCH, of Indianapolis, and Miss Margaret Lenora Guthrie, of Indianapolis, were married October 9th.

DR. J. B. PORTER, of Elkhart, has announced his retirement from the active practice of medicine. Doctor and Mrs. Porter will spend the winter in Florida.

DR. ROBERT E. LYONS, JR., of Bloomington, is enrolled as a graduate student in the University of Munich, where he is continuing his study of internal medicine.

THE Floyd County Medical Society held a meeting at New Albany, October 10th. Dr. W. F. Edwards presented a paper, his subject being "Focal Infection."

THE Elkhart County Medical Society held a meeting at Goshen, October 2nd. Dr. Robert M.

Moore, of Indianapolis, presented a paper on "Coronary Occlusion."

DR. JOSEPH D. HEITGER, of Louisville, Kentucky, has closed his office there and has moved to Pasadena, California, where he will continue the practice of medicine.

THE Ripley County Medical Society held a meeting at Osgood, October 1st. A business session was held, the time being devoted to discussion of a fee schedule.

MEMBERS of the Madison County Medical Society were addressed by Dr. J. H. Warvel, of Indianapolis, October 21st at a meeting held at the Grand Hotel, Anderson.

THE September meeting of the Carroll County Medical Society was held in the Burrows Presbyterian Church, September 18th. Dinner was served preceding the program.

AT the October 2nd meeting of the Wabash County Medical Society at Wabash the delegate and several members reported the state session. Doctors Wilson and Jewett were hosts.

THE Henry County Medical Society gave a dinner September 19th at the new Henry County Hospital at Newcastle, at which time the institution was inspected by the physicians.

DR. W. D. GATCH, of Indianapolis, presented a paper on "Recent Improvements in Treatment of Postoperative Complications" before the Tippecanoe County Medical Society, at Lafayette, October 9.

MISS CHARLOTTE HALE, of Logansport, and Dr. J. B. Maxwell, of Butlerville, Indiana, were married October 30th. Doctor Maxwell is superintendent of the farm colony for the state feeble-minded institution.

DR. HAROLD C. OCHSNER has been appointed as roentgenologist and head of the x-ray department of the Methodist Hospital, Indianapolis. Doctor Ochsner has been on the x-ray staff of the Mayo Clinic for the past three years.

ALBERT STUMP, of Indianapolis, attorney for the Indiana State Medical Association, presented an address on "Cause and Prevention of Malpractice Suits" before the meeting of the Carroll County Medical Society at Camden, Indiana, October 10th.

THE Terre Haute Academy of Medicine was addressed by Dr. Edward L. Keyes, professor of urology at Cornell University Medical College, October 23rd. His subject was "Pre-operative Measures to Be Used in Lessening Mortality in the Prostatic."

THE New York Academy of Medicine announces a fifth series of lectures on subjects of special interest to the practitioners, to be held on Friday afternoons, beginning November 7, 1930, through April 17, 1931. The profession generally is invited to attend.

At the October 21st meeting of the Delaware-Blackford County Medical Society, held at the Hotel Roberts, Muncie, Dr. R. H. Beeson, of Muncie, presented a paper on "State Medicine." Dr. P. D. Moore and Dr. Shelton Silberberg were elected to membership.

THE Abbott Laboratories, of Chicago, and the Swan-Myers Company, of Indianapolis, have agreed to combine their resources and consolidate their managements. The laboratories of the Swan-Myers Company will continue to be operated in Indianapolis until further notice.

THE Terre Haute Academy of Medicine held its regular meeting October 3rd, at the Deming Hotel. Following dinner, Dr. Barny Brooks, associate professor of clinical surgery at Vanderbilt University, talked on "The Treatment of Aneurism of the Lower Extremities."

THE Miami County Medical Society held a banquet meeting October 10th, at the Dukes Memorial Hospital, Peru. Dr. E. W. Bridgeman, associate professor of medicine of Johns Hopkins School of Medicine, was the principal speaker. His subject was "Auricular Fibrillation."

GEORGE S. DAVIS, one of the men to whom the house of Parke, Davis & Company owes its corporate name, died October 1st, at the age of eighty-five years. Mr. Davis had been in poor health for a considerable period, and had retired from active business efforts thirty years ago.

THE joint meeting of the Grant County Tuberculosis Association and the Grant County Medical Society was held October 9th, in the Spencer Hotel, Marion. The principal speaker was Dr. Stuart Pritchard, of Battle Creek, Michigan, whose lecture was entitled "Causes of the Cough."

THE Montgomery County Medical Society held a meeting at Culver Hospital, October 16th. Dr. Ernest Rupel, of Indianapolis, presented a paper on "Diseases of Urinary Tract" and the talk was illustrated with lantern slides. Dr. F. S. Crockett, of Lafayette, was guest of honor and discussant.

THE United States Civil Service Commission announces open competitive examinations for social worker (psychiatric) and junior social worker, applications for which positions will be rated as received by the U. S. Civil Service Commission at Washington, D. C., until December 30, 1930.

THE Madison County Medical Society held its October meeting at the Grand Hotel, Anderson, October 21st. Dr. J. H. Warvel, of Indianapolis, presented a paper on "Diagnosis and Treatment of Diabetes and Its Complications." The paper was illustrated by motion pictures from Doctor Warvel's case records.

THE organization of the Woman's Section of the Indiana State Medical Association was perfected during the Fort Wayne session. The president of the new organization is Dr. Nettie B. Powell, of Marion; vice-president, Dr. Kathryn Whitten, Fort Wayne, and secretary-treasurer, Dr. Bonnelle Souder, Auburn.

THE first seminar of the school year of the Indiana University School of Medicine was held in the auditorium of the Medical School Building, October 24th. Cases were presented by Drs. Edward G. Billings, Frank B. Ramsey, George Garceau, Dr. Dwight L. DeWeese, Dr. Louis Burns, Dr. Paul Harmon and Dr. W. D. Little.

THE United States Civil Service Commission announces open competitive examinations for chief nurse (Indian Service), head nurse (Indian Service), graduate nurse, graduate nurse, visiting duty and graduate nurse, junior grade (various services). Applications will be rated as received by the U. S. Civil Service Commission at Washington, D. C., until December 30, 1930.

THE U. S. Civil Service Commission announces open competitive examination for associate pharmacologist, applications for which must be on file with the U. S. Civil Service Commission at Washington, D. C., not later than December 10, 1930. Entrance salaries range from \$3,200 to \$3,800 per year. Full information may be obtained from the Civil Service Commission at Washington, D. C.

THE Hendricks County Medical Society held a meeting at Danville, October 17th. Dr. Ernest Rupel, of Indianapolis, presented a paper on "Genito-Urinary Diseases" which was illustrated with slides, and Mr. Raymond Bright talked on "Diphtheria Immunization." The November meeting of the society will be public and Mr. Bright will talk to the citizens on prevention of diphtheria.

THE Jay County Medical Society held its regular meeting October 3rd at the Portland Country Club. Dr. George S. Bond, of Indianapolis, presented a talk, his subject being "Heart Disease," with phonographic reproductions of heart sounds. The Jay County Medical Society has missed only one meeting this year, and did not discontinue meetings during the summer months as is the custom of many of the county societies.

THE Fountain-Warren County Medical Society met at Veedersburg, Indiana, October 2nd. Dr.

A. C. Holley and Dr. J. R. Burlington, both of Attica, presented papers. Doctor Holley talked on "X-ray Diagnosis of Colonic Flexures with Associate Contraction of Descending Colon and Pain Simulating Appendicitis." Doctor Burlington talked about his recent visit to France, attending the reunion of the Rainbow Division.

At the October 7th meeting of the Indianapolis Medical Society Carle Wile, attorney, talked on "The Lawyer on the Stage of History." At the October 14th meeting, cases were presented by Dr. E. N. Kime, Dr. V. D. Keiser, Dr. V. A. Lapenta, Dr. Karl M. Koons, Dr. Walter F. Kelly, Dr. D. O. Kearby and Dr. John F. Kelly. On October 21st, Dr. Murray N. Hadley presented a paper on "Cause of Death in Operative Treatment of Gall-bladder Disease" and Dr. Lyman Pearson presented a paper on "Cirrhosis of the Liver."

THE Indiana Society for Mental Hygiene will hold its annual meeting and conference on mental health at the Claypool Hotel, Indianapolis, December 8, 1930. The program will be devoted to a discussion of mental hygiene and its relation to social problems of dependency and delinquency; the mental defective and retarded child as educational problems; public health; and a state program for mental hygiene. Speakers of the national Society have been invited to address the conference.

THE U. S. Civil Service Commission announces open competitive examination for toxicologist, applications for which position must be on file with the Commission at Washington, D. C., not later than November 26, 1930. Competitors will be rated on their education, training, and experience, and on a thesis or publication. Entrance salaries range from \$3,800 to \$4,600 a year. Full information may be obtained from the U. S. Civil Service Commission, Washington, D. C., or from the secretary of the United States Civil Service Board of Examiners at the post office or customs house in any city.

THE Third District Medical Society held a meeting at the Country Club, New Albany, Indiana, October 8th. Papers were presented as follows: "The Mechanism of the Heart," by Dr. Emmett F. Horine, of Louisville, Kentucky; "Tonsillitis and Some of Its Sequelæ," by Dr. J. R. Dillinger, of French Lick; and "Intra-abdominal Abscesses," by Dr. Parvin Davis, of New Albany. Election of officers was held and Dr. Frank May, of Palmyra, was made president, Dr. E. W. Rand, of Marengo, vice-president, Dr. J. J. Johnson, Milltown, secretary. The next meeting of the society will be held at Wyandotte Cave, in May, 1931.

THE United States Civil Service Commission states that government hospitals throughout the

country, including those under the Veterans' Bureau, the Public Health Service, the Indian Service, and other branches, are in need of medical officers and nurses of various grades, and that Veterans' Bureau hospitals have vacancies in positions of psychiatric social worker and junior social worker. Full information regarding examinations, salaries, etc., may be obtained from the United States Civil Service Commission, Washington, D. C., or from the secretary of the United States Civil Service Board of Examiners at the post office or customs house in any city.

THE Seventh District Medical Society held a meeting at Indianapolis, October 28th. The afternoon session was held at the amphitheatre of the Indiana University School of Medicine. The councilor's report was presented; Dr. W. F. Sandy presented the president's address, and papers were read by Dr. Harry E. Mock, of Chicago, and Dr. Martin Fischer, of Cincinnati. The evening session was held at the Columbia Club. Following dinner, Dr. E. Starr Judd, of Rochester, Minnesota, presented a paper on "Clinical Manifestations and Treatment of Peptic Ulcer." The Woman's Auxiliary to the Indianapolis Medical Society entertained the visiting ladies.

THE forty-first annual session of the Association of American Medical Colleges was held in Denver, Colorado, October 14th, 15th and 16th, at the School of Medicine of the University of Colorado. A very interesting scientific program was presented. At the business session the University of Rochester and Duke University School of Medicine were voted into membership. Dr. Burton D. Myers, of Bloomington, Indiana, a member of the executive council of the association by virtue of the fact that he was the immediate past president, was re-elected to the Council to succeed Ray Lyman Wilbur, of Stanford University. Dean Maurice H. Rees, of the University of Colorado School of Medicine, was elected president. The association voted to accept the invitation of Tulane University School of Medicine, New Orleans, for the meeting place in 1931.

In addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Eli Lilly & Co.:

Amytal.

Pulvules Sodium Amytal, 3 grains.

Old Tuberculin, Human Strain, Concentrated, 2-vial packages.

McKesson & Robbins, Inc.:

McKesson's Vitamin Concentrate of Cod Liver Oil.

E. S. Miller Laboratories, Inc.:

Ampoule Sterile Solution Dextrose, U. S. P., 5 Gm., 10 cc.

Ampoule Sterile Solution Dextrose, U. S. P.,
10 Gm., 20 cc.
Plant Products Co.:

Plant's Magnesia Wafers.

The following articles have been exempted and included with the List of Exempted Medicinal Articles (New and Nonofficial Remedies, 1930, p. 477):

H. K. Mulford Co.:

Pollen Extracts Diagnostic-Mulford.

INDIANA UNIVERSITY NEWS NOTES

NORMAN BOOHER, of Lafayette, has been elected president of the first year class of the Indiana University School of Medicine at Bloomington.

DEAN CHARLES P. EMERSON, of the Indiana University School of Medicine, has returned from Atlantic City, New Jersey, where he went to recuperate following an operation. He is reported as improving rapidly.

A RECENT infant arrival at the Coleman Hospital for Women in Indianapolis is the new son of Dr. and Mrs. Thurman B. Rice. Doctor Rice is professor of bacteriology and epidemiology of the Indiana University School of Medicine.

GRADUATE nurses of the Indiana University Training School for Nurses have organized a card club, with members of the faculty and staff of the school and members of the dietary and occupational therapy departments as guest members. Meetings of the club are held monthly.

APPROXIMATELY seventy-five members of the Phi Chi professional medical fraternity attended the annual sophomore reception of the organization October 4th at the Spink Arms Hotel, Indianapolis. Dr. L. D. Carter, professor of nervous and mental diseases at the Indiana University Medical School, Indianapolis, was the principal speaker.

MARY M. ROBERTS, editor of the *American Journal of Nursing*, New York, addressed students of nursing at the Indiana University Medical Center at Indianapolis recently on the subject of opportunities in the nursing profession. Attending the meeting were public health nurses and graduate nurses and various staff members of Indianapolis hospitals.

FOUR graduate nurses from the Good Samaritan Hospital at Vincennes have been admitted by Mrs. Ethel Clarke, director of the Indiana University Training School for Nurses, as special students of children's diseases. The students are Miss Mildred Edwards, Miss Clarice Kerr, Miss Helen Melvin, and Miss Ermine Younghams.

They will have one semester's work with Riley Hospital child patients and will study certain courses pertaining to the care of children.

THE Indiana State Parent-Teachers' Association held a tree planting ceremony recently at Riley Park, in front of the James Whitcomb Riley Memorial Hospital for Children. They dedicated the tree to "the children of Indiana," in memory of the Hoosier poet. Dr. Louis Segar, of the pediatrics department of the Indiana University School of Medicine, spoke, preceding the dedication, on the subject, "Babies." Another speaker was Miss Winifred Sink, instructor of nursing in the Indiana University Training School for Nurses.

THE Indiana University chapter of the Nu Sigma Nu professional medical fraternity has announced the pledging of the following fourteen freshmen of the school of medicine: Norman Booher, Lafayette; McKinley Bohannon, Terre Haute; Wendell Brown, Indianapolis; Ermil Leslie, Folsomville; W. D. Hart, Anderson; Charles Schneider, Evansville; Ben Mankowski, Detroit, Michigan; Frank Oliphant, Indianapolis; William Clauser, Delphi; Max Garber, Manchester; Robert Fraser, Marion; Abram Woodard, Indianapolis; Otis McQuiston, Paxton, Illinois, and John G. Stephenson, Miami, Florida.

LANDSCAPING of the Indiana University Medical Center at Indianapolis under the direction of Ohmstead Brothers, landscape architects, is progressing rapidly. The Young Excavating Company, of Indianapolis, has the contract for grading. Low ground in front of the Riley Hospital is being filled in and higher ground to the east is being graded down. Some sodding and sowing of grass seed will be done yet this fall, but the major planting operations will be delayed until spring. The work is being done largely from a fund of \$10,000 donated by George A. Ball, Muncie manufacturer and vice-president of the Indiana University board of trustees.

SEVENTEEN Indiana University students of the medical school have been pledged to the Phi Rho Sigma honorary professional medical fraternity. The new members are as follows: Ralph Blackford, Middletown, Ohio; Stanton Bryan, Evansville; Robert Wisheart, North Salem; Wendell Anderson, Mentone; Robert Owsley, Thorntown; Dick Steele, Huntington; Donald Brodie, Huntington; Donald Wolfram, Brownsburg; William Mount, Kirklin; William R. Ferraro, Paterson, New Jersey; Wayne Ritter, Indianapolis; Douglas Ballard, Logansport; Alvin Turmail, Vallonia; Kenneth Jackson, Aurora; Farrar Aubertin, Wabash; Sheldon Morrison, Greensburg, and George Richardson, Marion.

THE Phi Beta Pi professional medical fraternity at Indiana University has announced the pledging of twenty-one students of the I. U. School of Medicine. These twenty-one students are as follows: Perry Cotton, Elwood; Robert Jewett, Wabash; Richard Terrill, Lawrenceburg; Michael Shellhouse, Gary; Richard Inwood, South Bend; William Proudfit, Osceola; Carl Trout, Windfall; Edgar Richard, Covington; James Hawk, New Palestine; Earl Mericle, Bargersville; Darrell Overpick, Brazil; Harold Zwick, Decatur; Louis Spalyar, Gary; Raymond Russell, Lapel; Frank Albertson, Vallonia; Basil A. Merrill, Wayne-town; Leonard Miller, Waldron; Robert Brosius, Fort Wayne; Sam Baker, Indianapolis; Charles Schutt, Elkhart, and R. B. Miller, Argos.

THE Indiana University hospitals were crowded throughout September and had a higher service record than in September a year ago, according to a report of Dr. E. T. Thompson, administrator of the hospitals and the Indiana University School of Medicine. Seven hundred and twenty-five patients were admitted to the Long, Riley, and Coleman Hospitals during the month, as compared with 659 for September of last year. All the hospitals operated to capacity and at times the daily average of patients was so high that it was difficult to find beds for emergency cases, according to Doctor Thompson. The University hospitals had a daily population during the month of 411, as compared with 340 for September a year ago. The largest gain in daily average population was recorded for the Riley Hospital, where addition of the new Kiwanis wing has largely increased the bed capacity.

PHI CHI, professional medical fraternity, has announced the pledging of the following students of the Indiana University School of Medicine at Bloomington: Thomas Tower, Leavenworth; Owen Wilson, Anderson; Marshall Tucker, Claypool; Frank Coble, Richmond; George Willison, Dale; J. Roger Surber, Muncie; Temple Miller, North Judson; Rex Dixon, Anderson; Fred Malott, Converse; Samuel Bechtold, LaGro; Robert Hill, Muncie; Jean Waldo, Indianapolis; Paul Zwerner, Terre Haute; Vernon Pancost, Elkhart; Melvin Durkee, Evansville; James McElroy, Scotland; Robert McElroy, Scotland; William Sutton, Cambridge City; John H. Combs, Koleon; Durward Paris, Kokomo; George Brother, Rockport; Frederick Giles, Bloomington; Albert Marshall, Indianapolis; Joseph West, Indianapolis; August Haswinkle, Indianapolis; Gustavus Peters, Frankfort; Benett Thayer, Frankfort; Byron T. Currie, Indianapolis, and Ralph Arisman, Elkhart.

MISS JOSEPHINE HULL, former superintendent of nurses at the Watts Hospital, Durham, North Carolina, has been appointed as the new assistant director of the Indiana University Training School for Nurses at Indianapolis. The new

assistant fills the vacancy left by the resignation of Miss Anna Gossman, now superintendent of nurses at the Children's Hospital in Detroit, Michigan. Miss Hull is a graduate of the Buffalo General Hospital and served as night supervisor of nurses there for two years before being appointed assistant superintendent of nurses in the Prospect Heights Hospital of Brooklyn. She served two years in that capacity and then became superintendent of nurses in the St. John's Hospital, Brooklyn. During the World War Miss Hull was with the Buffalo Hospital unit overseas and later became superintendent of nurses of the Watts Hospital in North Carolina, where she has been stationed for the past two and one-half years.

SOCIETY PROCEEDINGS

INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

August 19, 1930.

Meeting called to order at 4:00 p. m.

Present: Wm. N. Wishard, M.D., chairman; J. H. Stygall, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held August 12th read and approved.

The release upon The Tricho System, extracting the recent Better Business Bureau bulletin exposing the Tricho System for the removal of superfluous hair, approved for distribution to the state papers August 30th.

Radio release, August 23rd—"Preparation of Children for School."

Request for speaker:

September 16—Kiwanis Club, Cambridge City, Ind. Speaker to be obtained on subject of interest to the public.

The attention of the Bureau of Publicity was brought to the series of printed cards prepared by William Everett and Herbert Brown, of Richmond, Indiana. According to Mr. Everett and Mr. Brown these cards are to be sold to various physicians to be placed in waiting rooms and offices. The Bureau instructed the executive secretary to write the following letter to Mr. Everett and Mr. Brown in regard to these posters which are known as The Physicians and Laity Service:

"The cards of The Physicians and Laity Service were brought to the attention of the Bureau of Publicity of the Indiana State Medical Association at its regular weekly meeting on August 19th. The expression of the Bureau was that there is nothing objectionable in the eleven cards presented. The Bureau felt that the 'copy' was well prepared and effectively displayed."

At the meeting of the House of Delegates at Evansville in September, 1929, a resolution was adopted authorizing the Bureau of Publicity "to establish Archives of Medical History of Indiana and to recommend to the House of Delegates the name of a member of the Indiana State Medical Association as Historian, and that the appointment of such Historian shall be permanent when so elected by the House of Delegates until removed by death or has become incapacitated from other causes." This matter was to be brought to the attention of the Bureau for action at its next regular meeting.

Along this line the Bureau instructed the executive secretary to ascertain the date of the passage of the state laws authorizing the creation of county hospitals and one member of the Bureau was to prepare a letter of inquiry which would go to the different hospitals and to the older physicians in a few of the larger cities that had

hospitals, getting first-hand information concerning the first modern hospitals of Indiana.

The first constructive step to obtain a state hospital was embodied in a resolution introduced at the eighteenth annual session of the Indiana State Medical Association at Indianapolis, Tuesday, May 19, 1868, by the late Dr. William H. Wishard. The resolution follows:

"WHEREAS, The State of Indiana has no general Hospital in which the unfortunate and indigent poor of the State can receive medical and surgical treatment;

"RESOLVED, That the President of this Society appoint a Committee of one from each Congressional District to memorialize the next General Assembly to make an appropriation sufficient to establish and support a hospital for the treatment of such indigent persons."

This resolution was adopted and Dr. John S. Bobbs was made chairman of the Committee on State Hospital. The following year, 1869, Doctor Bobbs presented a resolution favoring the erection of a general state hospital located at Indianapolis. This resolution was unanimously adopted on the motion of Doctor Wishard. Doctor Bobbs died before the next annual meeting of the Indiana State Medical Association and nothing came of the undertaking. If he had lived it might have been accomplished within the next few years. As it turned out, the first law that granted the right to establish hospitals was enacted in 1895. This law gave cities the right to establish hospitals. Laws authorizing the creation of county hospitals were enacted in 1903 and 1907. The 1903 law authorized the Board of County Commissioners upon petition to build a hospital. The 1907 law provided that the Board, upon petition, submit the question concerning the erection of county hospitals to the public at a general election. Previous to 1903 the hospitals were built by various private hospital associations. This information was gained from Charles N. Kettleborough, head of the Legislative Reference Bureau of the State of Indiana.

Two letters were received by the Bureau asking the Bureau to name a physician who could examine and treat a child who was unable to talk. The secretary was instructed to write the inquirers asking them the name of their family physician, and, if the name were given, the secretary was to correspond with the family physician in regard to this matter.

The Bureau reviewed the many answers to letters sent out to editors of newspapers, officers of the State Association, and secretaries of the county medical societies, in regard to the releases of the Bureau of Publicity. Detailed study of suggestions made in each of these letters will be made by the Bureau and, wherever practicable, action will be taken to carry out the suggestions. The Bureau was more than pleased to receive the many letters in answer to their questionnaire and expressed its appreciation to the editors of the newspapers and to the officers of the Association and secretaries of the county medical societies for their many helpful comments, criticisms and suggestions. The following form letter was drawn up to be sent to the editors and physicians thanking them for their replies:

"The Bureau of Publicity of the Indiana State Medical Association wishes to thank you for your very good letter in answer to our request for comments, criticisms and suggestions concerning the newspaper articles which are distributed weekly by the Bureau.

"Your helpful suggestions and your encouraging comments are deeply appreciated. Please feel free at any time to call upon this office for any information or service you feel it may be able to render."

The first final draft of the annual report to be made to the House of Delegates was presented to the Bureau. This draft was to be studied further by the members of the Bureau and following correction was to be sent to THE JOURNAL of the Indiana State Medical Association for publication.

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole October 28, 1930.

October 7, 1930.

Meeting called to order at 4:00 p. m.

Present: Wm. N. Wishard, M.D., chairman, J. H. Stygall, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting of August 19th read, and the secretary was instructed to confirm the statement contained in these minutes concerning the erection of the first state general hospital.

The five special news stories upon the annual session were released on the following dates:

Wednesday, September 17.

Thursday, September 18.

Saturday, September 20.

Sunday, September 21.

Wednesday, September 24.

The article, "Where Do You Sleep?", prepared for release Saturday, October 18.

Radio releases:

August 30—"The Common Drinking Cup."

September 13—"Can You Answer These?"

October 4—"Competitive Athletics."

Speaking engagements filled:

Sept. 12—Carroll County Medical Society, Flora, Ind.

Oct. 6—Rush County Medical Society, Rushville, Ind.

"Significance of Heart Sounds."

Requests for speakers:

Oct. 7—Kiwanis Club, Cambridge City, Ind. Speaker obtained to talk on "Periodic Health Examinations."

Oct. 9—Kiwanis Club, Richmond, Ind. Speaker obtained to talk on "Health Fads and Foolishness."

Oct. 10—Adams County Medical Society, Decatur, Ind. Speaker obtained to talk on "Some Everyday Heart Problems."

Oct. 10—Carroll County Medical Society, Camden, Ind. Speaker obtained.

Oct. 14—Knox County Medical Society, Vincennes, Ind. Speaker to be obtained to talk on "Undulant Fever."

Oct. 15—Tri-County Medical Society, North Vernon, Ind. Speaker obtained.

The secretary was instructed to write a note coming from the Bureau of Publicity to Doctor Emerson, a member of the Bureau, who has been ill.

Several requests have been received lately from school officials asking the State Association to send *Hygeia* free of charge for use in the schools. The Bureau regrets that it has not funds enough to do this. The suggestion was made that the matter be taken up with Mrs. Edna Hatfield Edmondson, executive secretary of the Parent-Teacher Association, Bloomington, Indiana, asking her for any suggestion she may have in regard to the matter.

The following bills were approved for payment:

| | |
|-------------------------------------|---------|
| Central Press Clipping Service..... | \$ 5.00 |
| A. B. Dick Company..... | 3.50 |
| Elmer T. Lefferson..... | 2.00 |
| Central Press Clipping Service..... | 7.74 |
| The Bailey Office Supply..... | 15.00 |

Total\$33.24

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole October 14, 1930.

October 14, 1930.

Meeting called to order at 4:00 p. m.

Present: Wm. N. Wishard, M.D., chairman; J. H. Stygall, by proxy, and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held October 7th read and approved.

The release for publication—Saturday, October 25th, "How Can You Know?", read and approved. This release is based upon a radio health talk from the New York State Department of Health entitled "Facts About Quacks."

Radio release, October 11—"Where Do You Sleep?"

Radio release, October 18—"How Can You Know?"

Reports of medical meetings:
Sept. 12—Carroll County Medical Society, Flora, Ind. "Epidemic Encephalitis."
Oct. 6—Rush County Medical Society, Rushville, Ind. "Diagnosis and Significance of Heart Sounds."
Oct. 7—Kiwanis Club, Cambridge City, Ind. "Heart Disease in Modern Life."
Oct. 9—Kiwanis Club, Richmond, Ind. "Health Fads."
Requests for speakers:
Oct. 14—Knox County Medical Society, Vincennes, Ind. Speaker obtained to talk on "Diagnosis and Significance of Heart Sounds."
Oct. 15—Tri-County Medical Society, North Vernon, Ind. Speaker obtained to talk on "Internal Secretions."

In answer to letters written to the circulation manager of *Hygeia* in regard to requests that have been received lately from school officials asking the State Association to send *Hygeia* free of charge, the Bureau has received the following reply:

"For two or three years a physician in the east has been interested in introducing *Hygeia* to the libraries of this country so he has offered a complimentary subscription to any library who is not a subscriber providing they would display the magazine in a conspicuous place so that as many as possible of the library users would see it."

This information was to be embodied in letters sent to school officials who make these requests for *Hygeia*.

Letter received from the Trustee of Center Township requesting that if any member of the State Association is in need of an employee a communication be sent to Amelia Harding, Trustee Center Township, 215 East New York Street, Indianapolis, Indiana. The trustee writes: "I know that your Association can be of vital assistance to this office by properly conveying the above message to your people and requesting them to call the Center Township Trustee's office, Riley 4020 or Riley 1954, whenever in need of help. I can supply men or women very promptly." This letter was to be forwarded to the secretary of the Indianapolis Medical Society.

Letter received from the editor of the *Dale Weekly Reporter* asking to be placed upon the mailing list for the weekly releases of the Bureau.

The following bill was approved for payment:
Beck Letter Service.....\$ 4.30
There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole October 21, 1930.

October 21, 1930.
Meeting called to order at 3:00 p. m.
Present: Wm. N. Wishard, M.D., chairman; J. H. Stygall, by proxy, and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held October 14th read and approved.

The release, "Cold Facts," for publication Saturday, November 1st, read and approved.

Radio release, October 25th, "Cold Facts."

Reports of medical meetings:
October 10—Adams County Medical Society, Decatur: "Everyday Heart Problems."
October 15—Tri-county Medical Society, North Vernon: "Juvenile Diabetes."

Requests for speakers:
November 12—Kiwanis Club, Muncie. In regard to this request the secretary was instructed to write to the physician making the request asking if the request for a speaker met with the approval of the local county medical society. This rule has been followed universally by the Bureau when requests have come from persons other than the officers of the local county medical society. Upon receiving word from this county society secretary that it will be satisfactory to the local profession to have some outside speaker assigned to address the Kiwanis Club, the secretary of the State Association was instructed to obtain a speaker.

Any Tuesday evening in November—Hanover Civic League, Hanover, Indiana. Speaker to be obtained.

Request received that *Hygeia* be sent to the school library at Cynthiana, Indiana.

The Disaster Relief Handbook from the American Red Cross received.

Clipping brought to the attention of the Bureau in regard to the statement scoring the practice of letting young physicians operate. Data in regard to this statement, which was made at the hospital conference of the clinical congress of the American College of Surgeons, were to be obtained from the report of that congress which would be printed at a later date.

The secretary was instructed to write to Mrs. Harvey Wiley telling her that the picture of Dr. Harvey Wiley which she so kindly sent has been framed and has been hung in the office of the Indiana State Medical Association. This letter was to express the appreciation of the Bureau and the members of the State Association for this picture.

The following bill was approved for payment:
A. B. Dick Company.....\$ 3.50
There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole October 28, 1930.

INDIANA STATE BOARD OF HEALTH

DIVISION OF COMMUNICABLE DISEASES

MONTHLY REPORT, OCTOBER, 1930

Eighty-seven counties in the state sent in morbidity reports during the month. Five counties, namely, Brown, Decatur, Newton, Warrick and Whitley, did not report. Reports are positive or negative. Seven counties, Adams, Blackford, Franklin, Jennings, Miami, Randolph and Steuben had no diseases, but sent in negative reports. There were mailed to the Division from the different health units in the state 504 negative report cards during the month.

The morbidity record for the month is shown by comparison of the urban and rural population below:

| DISEASES | TOTAL | URBAN | RURAL |
|------------------------|-------|-------|-------|
| Tuberculosis | 163 | 96 | 67 |
| Chickenpox | 135 | 98 | 37 |
| Measles | 40 | 23 | 17 |
| Scarlet fever | 336 | 190 | 146 |
| Smallpox | 76 | 23 | 53 |
| Typhoid fever | 62 | 21 | 41 |
| Whooping cough | 57 | 46 | 11 |
| Diphtheria | 201 | 119 | 82 |
| Influenza | 30 | 0 | 30 |
| Pneumonia | 4 | 2 | 2 |
| Mumps | 5 | 5 | 0 |
| Poliomyelitis | 55 | 30 | 25 |
| C. S. meningitis | 16 | 12 | 4 |
| Trachoma | 1 | 0 | 1 |

Morbidity prevalence of the principal diseases shows an increase over the previous month. This is normal for the season.

Scarlet fever is the most prevalent disease reported with a thirty-eight percent increase over the preceding month when 128 cases were reported. The disease begins a rapid increase usually in October when cold weather starts. Scarlet fever is regarded as a cold weather disease. It is scarcely known in the tropics. Prophylaxis against the disease in Indiana is practically a negligible quantity. The estimated expectancy for October is 362 cases. The estimate is made over a period of seven years.

Diphtheria shows a marked increase over last month when only fifty-eight cases were reported. Thirty-six counties reported cases. Lake and Porter counties reported forty-one and thirty-nine cases, respectively. However, the increase shows the seasonal rise. The estimated expectancy is 336 cases.

Smallpox is not far off the normal trend for October. Seventy-three cases were reported last month; fifty-one cases the corresponding month the previous year. The normal average is 102 cases.

Typhoid fever shows an increase—fifty-four cases last month and thirty-two cases in October the preceding year.

It is about time for typhoid to decline. Late summer and early autumn is typhoid time. The average prevalence for the period is 103 cases.

Poliomyelitis shows a marked increase over the previous month for this disease. There were thirty-nine cases last month. The disease has, perhaps, reached its peak. It is declining throughout the state. Twenty-five counties reported cases. These cases are considered sporadic. It is one of the mystery diseases. Indianapolis reported ten cases.

C. S. meningitis made a three-case increase over the previous month. These cases were from seven counties. Lake county reported seven of them. Just why this disease and poliomyelitis break out one in a family in widely scattered areas is an unsolved problem.

H. W. MCKANE, M.D.,
Collaborating Epidemiologist,
Indiana State Board of Health.

WOMAN'S AUXILIARY TO THE INDIANA STATE MEDICAL ASSOCIATION

At the annual meeting of the Woman's Auxiliary of the Indiana State Medical Association held at the Anthony Hotel in Fort Wayne, September, 1930, Dr. Albert E. Bulson, editor of *THE JOURNAL*, proposed that the Auxiliary engage in constructive work in furthering the aims and objects of medical men and offered some suggestions for a constructive program, as follows:

- I. Educational. II. Civic. III. Political.
IV. Economic. V. Social.

I. EDUCATIONAL:

1. Exercise supervision and control over programs of women's clubs.
 - (a) All clubs should have capable physicians' wives on health committees.
 - (b) Secure speakers from Bureau of Publicity, State Association, to deliver health addresses.
 - (c) Prevent food and health propagandists of every kind from appearing before clubs. Keep off quacks and faddists with their misleading propaganda.
 - (d) Study preventive medicine—vaccination, diphtheria prevention, typhoid inoculation, and the value of animal experimentation in order to combat self-opinionated advice from club sisters.
 - (e) Urge Club members to subscribe for *Hygeia* and have same in club reading rooms and in public libraries.
2. Cooperate with organizations:
 - (a) Parent-teachers' associations.
 - (b) Workingmen's clubs.
 - (c) Nurses' associations.
3. Guide the press:
 - (a) Secure publication of health articles (Bureau of Publicity).
 - (b) Call attention to the dangers of quack advertising and faddists, "cure-alls," "faith cures," etc.
 - (c) Try to suppress untruths and fallacies concerning preventive medicine as published in women's magazines, popular monthly magazines and especially in church organs.
4. Urge Periodic Health Examinations:
 - (a) Set the example yourself.
 - (b) Get your friends and club associates to have examinations.
 - (c) Urge your husband to take more interest in physical examinations and do the work thoroughly.

II. CIVIC:

1. Keep up with community interests:
 - (a) Sanitation.
 - (b) Water supply.
 - (c) Food control (dirt, flies, adulteration).
 - (d) Milk supplies (constant inspection, pasteurization, certified milk).

- (e) Clean alleys—garbage disposal.
- (f) Noise and smoke abatement.
- (g) School lunches. Supervision of lunch rooms and confectionery rooms near schools.
- (h) Vaccination—diphtheria prevention—typhoid inoculation; quarantine regulations.

III. POLITICAL:

1. Study proposed medical and health legislation so that you can talk intelligently concerning it.
2. Determine sentiment of candidates for office:
 - (a) Concerning general feeling toward medical profession.
 - (b) Attitude on standards for practice of medicine.
 - (c) Attitude on pseudo-medical cults.
 - (d) Attitude on health legislation.
3. Without undue publicity use influence to defeat candidates for office who favor cults or vicious medical legislation, or who are opposed to or lukewarm in support of legislation supported by medical profession.
4. Be sure that you and your husband's votes are for the things for which the medical profession stands.
5. Do not engage in unbecoming political controversies or be led into such by political parties or candidates. Make your influence felt quietly and by force of numbers. Every candidate for office fears the effect of unity among women.

IV. ECONOMIC:

1. Every physician's wife should be interested in the legitimate business success of her husband. To that end she should use her influence to prevent—
 - (a) The unfair competition of badly managed welfare clinics which in the final analysis are detrimental to public and profession alike.
 - (b) The impositions practiced by individuals and under the guise of charity secure valuable medical and surgical services for which at least modest fees should be paid.
 - (c) The increasing tendency among well-intentioned welfare workers to demand and secure unjustified free professional services for a large class of people who while not able to pay regular fees are not objects of charity but can pay something and thus aid in limiting pauperism and dependency with its ultimate increase of general taxation. Oppose free clinics, open to all, that pauperize the community.
2. On behalf of the community the physician's wife should use her influence to bring about the realization that the medical care of the sick poor is a community obligation and not one to be shifted to a few generous and philanthropically minded physicians.
3. Keep posted on legislative action that affects physicians as in the case of taxation:
 - (a) Unfair provisions of income tax.
 - (b) Unfair duties on instruments, drugs, books, etc.
 - (c) Paternal legislation like Sheppard-Towner bill.
4. The better the physician the better the service to public and correspondingly better income from service rendered, hence husbands should be encouraged to read latest medical journals, attend post-graduate courses, and above everything else attend meetings of county medical society. Wives can do much to encourage this feature.

V. SOCIAL:

1. Least important but necessary in the general scheme:
 - (a) Get to know physicians' families—create good fellowship. Some of us are more likable than many think we are.
 - (b) Have meetings occasionally to discuss the functioning of Auxiliary and plans for future.

Invite physicians to speak. Serve light refreshments.

- (c) Don't alienate women desirable as members by unseemly scramble for office or preferences of any kind. Select your representatives with an eye to ability and fitness for the position.
- (d) Don't neglect the social features which promote acquaintance and good feeling among your members, but make that a minor feature in your constructive work.
- (e) Encourage the admiration, sympathy and help and the appreciation of members of the medical profession and be guided by their advice.

ASSOCIATION OF AMERICAN MEDICAL COLLEGES

The forty-first annual meeting of the Association of American Medical Colleges was held in Denver, October 14th, 15th, 16th. Among the very interesting papers read was that by G. Canby Robinson, of Cornell Medical School, New York, entitled "A Survey of Several Educational Experiments in American University Medical Colleges." Dr. Franklin Ebaugh, of the University of Colorado School of Medicine, read a very important paper on "The Progress in Teaching Psychiatry."

The second annual report of the Committee on Aptitude Tests was made by Torald Sollman, of Western Reserve University School of Medicine. The relation of the Association to State Licensing Boards was discussed by Harold Rypins, secretary of the Board of Medical Examiners of the State of New York.

Dr. Edward Thorpe, of the University of Pennsylvania School of Medicine, read a very interesting paper on the relative value of cultural courses in premedical training, while E. P. Lyon, Dean of the University of Minnesota Medical School, presented a paper on the cultural value of the medical curriculum.

At the business session Dr. Burton D. Myers was elected to the Executive Council to succeed Ray Lyman Wilbur, and later at a meeting of the Executive Council Doctor Myers was elected chairman of the Council.

In view of the fact that the Examining Boards of the United States will defer to the Association in all matters relating to standards for entrance on medical education, the work of the Council for the coming year in outlining a program of activities for the Association is particularly important.

The meeting in 1931 will be held at Tulane University in New Orleans.

It was particularly regrettable that, because of illness, Dean Darrach, of Columbia University School of Medicine, president of the association, was unable to be present. Dean Rees, of the University of Colorado School of Medicine, was elected president for the coming year, with Dean Bass, of Tulane University School of Medicine, vice-president.

ALLEN COUNTY MEDICAL SOCIETY

The Allen County Medical Society held its regular meeting September 2, 1930, at the Wayne Pharmacal Building at 8:15 p. m.

Minutes of the previous meeting were read and accepted.

There being no clinical cases, Dr. Charles J. Rothschild made a few remarks concerning the plans of this year's administration. He made a plea for less klannish spirit and more unity on the part of the whole society. A plan was suggested relative to program exchange with the surrounding societies which should bring closer relationship with the doctors in this section of the state. With respect to our own programs the president hopes for more of the clinical type of presentation. He also called attention to the useless and prolonged discussions which sometimes take place on the floor.

He hopes to have the constitution and by-laws of the society brought up to date, as there are some conflicting articles and paragraphs.

The establishment of a credit rating bureau which was

fostered last year will be carried to a conclusion rather promptly.

In closing it was proposed that a plan for a home for the society be instituted soon.

Donelley P. McDonald, secretary of the People's Trust Company, of this city, gave a splendid dissertation on investments. Four types of investments were considered:

1. Savings Accounts: The safety of these has not been questioned in the past five years where the bank has had a capital and surplus amounting to \$2,000,000. The account is always at par and immediately available and nets a good rate of income providing one's scruples concerning taxes are not too meticulous. The accepted budget for savings accounts usually is given as one-half of one year's income.
2. Bonds: These were discussed from the standpoint of government bonds, public utility bonds, industrial bonds, rail bonds, and first mortgage real estate bonds.
3. Stocks: Some of the factors not considered in the stock market has been the constant increase or decrease in the size of the dollar.
4. Investment Trusts: The speaker was in favor of these, but called attention to so many confusing factors that it would take a Philadelphia lawyer to understand the contracts which the trustees set out for the investor. He emphasized the importance of being sure of the integrity of the trustees, whether or not the shares are fixed or manageable, what the prices of the shares are on the stock market, and that the trustees do not reap more than seven percent for handling the shares over the period of time for which the trusts run, and that this seven percent be paid out of somebody else's pocket besides the investors.

In closing the speaker summarized any investment from the standpoint of the following notations:

- (1) Safety of principal.
- (2) Yield.
- (3) Marketability.
- (4) Collateral value.
- (5) Tax status.

The paper was discussed ably by Doctors Cornell, Bulson, and Havice. A rising vote of thanks was given the speaker for his splendid presentation.

The president called attention to the indigent committee appointed at the last meeting, and also appointed a new committee to take the place of the one now cooperating with the Community Chest relative to the medical care of Fort Wayne's indigent. Doctor Shafer was made chairman of this committee and the other two members, Doctors Ray and Carlo.

After some discussion concerning the noise of ambulances a motion was made by Doctor Havice, and seconded, that the society go on record as being opposed to much unnecessary noise being made by the sirens of certain ambulances in the city. Motion carried. Whereupon the president instructed Doctor Rawles, chairman of the Public Health and Legislative Committee, to consult with the proper authorities at the city hall, apprising them of the society's stand on this subject.

Twenty-four members present.

Adjournment.

The Fort Wayne Medical Society held its regular meeting at the Wayne Pharmacal Building, September 16, 1930, at 8:15 p. m.

Minutes of the previous meeting were read and accepted.

Dr. A. J. Sparks presented a paper on the use of Uroselectan, the chemical name of which is sodium salt of 2-oxo, 5-iodopyridine-N-acetic acid and it is used as a contrast agent for the radiographic demonstration of the kidneys and urinary tract by means of intravenous injections. The dosage varies from twenty to one hundred cubic centimeters of a forty-percent solution, depending upon the age of the patient. Its administration should be very slow and so far Doctor Sparks has had no untoward results.

It is not a substitute for the regular cystoscopic pyelogram studies where such are possible; however, its use so far has been of great value in cases where these studies cannot be obtained by virtue of age, obstruction, etc. Besides giving information as to anatomical structures the dye serves as a means of determining the excretory function in a quantitative way.

The following cases were reported and their demonstration assisted in by Doctor Velkoff:

First Case: One female with no excretion from the right kidney.

Second Case: Male with intermittent exacerbations of renal tuberculosis for the past two years. In connection with this case Doctor Sparks questioned the use of this iodide preparation in a tubercular kidney.

Third Case:—That of a child with suspected deformity of the kidney showing dilated calices on the left with dilated ureter, contracted bladder, and tubercle bacilli in the urine.

Fourth Case: That of a normal kidney showing rapid excretion of the dye into the bladder.

In discussion Doctor Short congratulated the essayist on the pictures and stated that Von Lichtenburg was willing to rely upon this procedure for his whole study of the genito-urinary tract. He also called attention to the fact that Doctor Cameron, of this city, was the first one to introduce the iodide radical into solutions for safe pyelography.

Doctor Velkoff called attention to the newness of this procedure, that many more clinical cases vs. pathological specimens were necessary before enthusiastic conclusions could be drawn. He also called attention to the necessity of cooperative work in this field on the part of the urologist, pathologist and radiologist. Doctor VanBuskirk in discussing the paper referred to a case wherein this method demonstrated a functioning kidney whose ureter had been ligated seven years previously. The paper was closed by Doctor Sparks.

Doctor Bruggeman moved that the chair appoint a committee to work in conjunction with the Community Chest, but before entering into any form of contract report back to the society. Motion was seconded and passed. This committee was appointed with Doctor Shaefer as chairman and Doctor Ray and Doctor Carlo as the other two members.

Forty-nine members, two guests, present.

Adjournment.

L. P. HARSHMAN, M.D.,
Secretary.

ST. JOSEPH COUNTY MEDICAL SOCIETY

The St. Joseph County Medical Society held its first fall meeting September 30, 1930, in the Public Library with Dr. Geisler, president, in the chair.

Dr. Miller announced that the annual meeting would be held November 19, 1930, the clinical meeting in the morning at the Children's Dispensary followed by luncheon there through the courtesy of the dispensary staff.

Drs. Bosenbury, Stoltz, Giordano and Bertling reported on the activities of the House of Delegates at the state meeting. Dr. Darden announced a short course on tuberculosis to be held at Healthwin, Wednesdays and Thursdays at 10:00 a. m.

Applications for membership made by Drs. Morris Balla and E. E. Linn were referred to the board of censors. A medical symposium on headache was given by Drs. R. L. Sensenich, H. L. Cooper and Robert V. Hoffman. Dr. Sensenich took up headaches caused by tumor of brain, herpes zoster, glaucoma, injury to nose, tonsillitis, cervical arthritis, gout, hydrocephalus and presence of wax on the ear drum in the external auditory canal. All of these headaches were taken from cases in his private practice.

Dr. Cooper reviewed about twenty cases of headache entirely relieved by drainage of gall bladder.

Dr. Hoffman took up headaches from a psycho neurotic standpoint, outlining a number of cases. The subject was discussed by Drs. Stoltz, Allen, Sullivan, Berteling, Miller, Bickel, Lent and Fisher.

The St. Joseph County Medical Society met at the LaSalle Hotel Wednesday, October 8, 1930, for a dinner meeting.

Dr. H. M. Richter, Professor of Surgery at Northwestern University, spoke on "Thyrotoxicosis, Problems of Diagnosis and Treatment." Dr. Richter defined thyrotoxicosis not as a gross anatomical growth in the neck but as a toxemia. One could have a thyrotoxicosis without palpable thyroid. Without the thyroid gland the disease is unthinkable. Exophthalmus was evidence of a delayed diagnosis. A thyrotoxicosis even though the thyroid is not palpable should be recognized before exophthalmus has taken place. Toxemia is produced by an increased amount of thyroid secretion acting on one or another part of the body as the heart, central nervous system or the digestive system.

Early cases show a change in disposition, beginning loss of weight and unexplained tachycardia. Typical cases give a cardiac picture, not explainable by pathological findings unless this cardiac condition is superimposed upon an already damaged heart such as one of rheumatic type. Fibrillation should be investigated for thyrotoxicosis.

In gastrointestinal cases, a violent diarrhea is almost always present. Other symptoms will appear in adequately taken histories. In mental cases, the patient is restrained, forced to eat, nervous, tired, has many ailments, rapid pulse, does not sleep well, irritable or apathetic, loss of weight. Another group is that in the menopausal age. A fibrillating heart, tremor, alteration of eyes, loss of weight, should always lead to possible diagnosis of thyrotoxicosis. The use of iodine in the form of Lugol's solution in fifteen minims doses is a therapeutic test.

Treatment is to build up patient for three, six or ten weeks before operation. After an adequate thyroidectomy, the metabolism will drop to normal in ten days. Relapses are due to the leaving behind of too much of the thyroid gland.

Dr. Richter's paper was discussed by Drs. Sensenich, Wilson, Baker, Myers, Skillern, Green, Gordon, Sandock, Lyon and Dr. King of Benton Harbor, Mich.

The St. Joseph County Medical Society met in the Public Library October 14, 1930, with President Geisler presiding.

The paper of the evening was by Dr. Carl Langebalm on "Infections of the Hand." An abstract of Dr. Langebalm's paper is as follows:

The anatomy of the hand with particular reference to the peculiarities of the distal phalanx, the location of the tendon sheaths, their extensions into the palm from the thumb and ring fingers compared with the tendon sheaths of the index, middle and ring fingers, the location of the thenar and mid-palmar spaces and their relation to the radial and ulnar bursae, were stressed.

Felons, suppurative tenosynovitis and fascial space infection, their signs, symptoms and treatment were discussed in detail. Particular attention was given to the placing of the hand, in the graver infections, in the position of function, which is dorso flexion of the wrist at an angle of 35 degrees and flexion at the meta carpal phalangeal and inter phalangeal joints.

The paper was discussed by Drs. Skillern, Myers, Bolling, Geisler, Sullivan, Gittens, and Haley.

Dr. H. W. Plaggemeyer, of Detroit; Dr. R. B. Canfield, of Ann Arbor; Dr. J. W. Harris, of Madison, Wis.; Dr. R. L. Haden, of Cleveland; Dr. L. G. Rowntree of the Mayo Clinic, will be the speakers at the annual meeting of St. Joseph County Medical Society Wednesday, November 19, 1930.

Respectfully,

MARTHA BREWER LYON, M.D.,
Assistant Secretary-Treasurer.

CORRESPONDENCE

THE BRITISH MEDICAL ASSOCIATION

Indianapolis, October 4, 1930.

Editor THE JOURNAL:

The following outline will comply with your request that I give you my impression of the program of the British Medical Association held in Winnipeg in August of this year.

All clinical meetings were held as a general meeting at 8:30 a. m. and these consisted of never more than one clinic and usually occupied a half to three-quarters of an hour.

The sectional meetings were held at ten o'clock in the morning and were supposed to adjourn at one, but rarely held more than two hours and more often an hour and a half. These sectional meetings were limited to two subjects, so that there was ample time for the presentation by the essayist and for discussion.

In the afternoons at two o'clock each day there were two clinical addresses, held at a general meeting and with subjects which were of interest to all members of the profession and these subjects never required over one-half hour for presentation, leaving ample time for general discussion.

The above arrangement impressed me from the fact that the work given conveyed the impression of value to every member of the profession. Also, one did not get mental indigestion from the variety of subjects and the number of subjects presented. I believe that much more good was accomplished, and lasting good, by this sort of arrangement than by any that I have ever observed. I have noted often in both our state and national meetings that a single medical or surgical meeting would have four to six essayists. A meeting like this is like a student cramming for examination, the essentials of it lasting very little longer than the meeting itself.

If the above observations are of any help in arranging our programs in the future they will be sufficient excuse in themselves for this letter.

Sincerely,

CHAS. R. SOWDER, M.D.

QUACKS AND QUACKERY

Texas State Board of Medical Examiners.

Office of the Secretary,

Dallas, Texas.

Dr. W. R. Davidson, Secretary,
State Board of Medical Registration and Examination,
413 State House, Indianapolis, Indiana:

Dear Doctor Davidson:—On page 236 of the August, 1930, issue of the *Federation Bulletin* I note, among others, the name of "Dr." J. D. Levine, publisher of the *Health Messenger*. The *Bulletin's* article advises that the Indiana State Medical Association is carrying on a drive against "itinerant food faddists" and asking the cooperation of all physicians. It also advises that J. D. Levine has an "M. D." degree in Illinois.

I am writing this letter to advise you so that, if you deem it advisable, you may inform the State Association that we had some dealings with Levine about five months ago. He came to town and ran an ad in the newspapers and gave a free lecture at one of the leading hotels of this city. The lecture was attended by our Special Agent, who made a report to me the next day. Levine had a lot of circulars that he passed out, which had the usual line of bunk and the initials "Dr." before his name. He had pictures of his "before and after" treatments. His line while here was Iriology.

Levine was brought before the grand jury, where he made his explanations, but with no avail, and he was cautioned that unless he left the state he would be prosecuted. At the investigation he admitted that he had been fined in Chicago for violation of the Illinois Medical Practice Act; that he had *never* attended a medical

school; and that he was laying claim to the titles of Doctor of Physiotherapy, Doctor of Spondylotherapy, Doctor of Chiropractic, Doctor of Naturopathy, etc.

Levine left Dallas and went to Fort Worth, and it was learned a few days later that he talked the radio station WBAP into permitting him to buy time on the air. He gave one, or possibly two, lectures over the radio and he was cut off and was told that they would not permit him to broadcast and that he would be prosecuted unless he left town.

Levine then returned to Dallas and attempted to open up here. He inserted one advertisement and was immediately subpoenaed before the grand jury. When the time came for him to appear before the grand jury it was found that he had left town. Nothing has been heard from him since, although we sent out a circular letter to the larger county societies. I am enclosing a copy of the circular for your information, also one of Levine's pamphlets which he distributed at his lectures. As we have received no additional reports of his activities, I presume Levine has decided to deprive our state of his "wonderful" curative powers and leave us all to die—of old age.

With best wishes and assurance of personal regard,
I am,

Yours truly,

T. J. CROWE, M.D.,
Secretary Texas State Board
of Medical Examiners.

BOOK REVIEWS

Books received since October 1, 1930:

MENTAL ASPECTS OF STAMMERING. By C. S. Bluemel, M.A., M.D., L.R.C.P. (London), etc., Clinical Instructor in Neurology of the University of Colorado School of Medicine. 152 pages. Illustrated. Cloth. Price \$2.50. The Williams & Wilkins Company, Baltimore, 1930.

MEDICAL AND SURGICAL REPORTS OF THE EPISCOPAL HOSPITAL. Volume VI. Commemorating the Seventy-fifth Year of the Hospital of the Protestant Episcopal Church in Philadelphia. 460 pages. Illustrated. Cloth. Press of William J. Doran, Philadelphia, 1930.

Book Reviews:

OUTLINE IN OBSTETRICS FOR NURSES. By F. W. Rice, M.D., Instructor in Obstetrics, Iowa Methodist Hospital and Broadlawns General Hospital, Des Moines, Iowa. Pages 228 with 56 illustrations. Cloth \$2.00. The C. V. Mosby Co., St. Louis, 1930.

This book is, as entitled, an outline, and not a textbook. It is concise, well stated, and well arranged; being interleaved with blank pages it enables the nurse to add special notes during lectures. In this way it should be especially valuable to the nurse who has difficulty in taking lecture notes.

It is subdivided into eleven chapters, plus a twelfth, which consists of a list of fifty review questions.

It should prove a ready aid to the nurse desirous of brief reference as it is well indexed, but it cannot supplant a general textbook or reference.

SURGICAL PATHOLOGY. By William Boyd, M.D., Professor of Pathology, University of Manitoba, Winnipeg, Canada. Second edition, revised and reset. 933 pages with 474 illustrations and 15 colored plates. Cloth. Price \$11.00. W. B. Saunders Company, Philadelphia and London, 1929.

This book well could appeal to any practitioner of medicine and particularly to the surgeon. Any discussion of pathology is a profitable line of investigation to a physician or surgeon. We are apt to forget that in the last analysis pathology is the foundation upon which the practice of medicine rests.

There has been a disposition in recent years to shift the conception of disease from pathology to chemistry.

The chemist contends that disease in its last analysis is a matter of perverted chemical reactions. However, for the practical surgeon, cellular pathology remains the basis upon which must rest his understanding of the treatment of disease.

From a literary standpoint this book is extremely readable and contains the personality of the author. It is a distinct triumph for an author to make a narrow, scientific subject interesting reading. This requires an art of much higher quality than a novelist. This book can be recommended highly to all those who are interested in the subject of surgical pathology.

DISEASES OF THE THYROID GLAND. By Arthur E. Hertzler, M.D. Second edition. Cloth. Price \$7.50. C. V. Mosby Co., Publishers, 1929.

Hertzler has of recent years been a prolific writer covering a wide range of medical subjects. Although an active surgeon he is at the same time a student of physiology and pathology. His interest in pathology is shown by the fact that 75 pages of the 276-page monograph is devoted to the chapter on pathologic anatomy. In this chapter he discusses his own conception of the development of diseases of the thyroid gland, and the relation of one type to another. He conceives the various types to be related closely, the life history of a diseased thyroid gland showing all the cellular changes characteristic of colloid, adenomatous and exophthalmic goiter. He objects to any classification that would place a goitrous patient in one group as a clinical and pathologic entity. This conception undoubtedly simplifies the problem of understanding diseases of the thyroid gland both as to pathology and treatment.

The book is illustrated well and contains a practical chapter on hospital management by Victor E. Chesky, M.D., an associate surgeon to the Halstead Hospital.

It is unfortunate that the author should find it necessary to criticize the study of diseases of the thyroid gland by a group of specialists when compared to the study by a single individual. Such a study by groups of specialists he says "has done more than any other factor to delay the understanding of the goitrous process." Such a naive statement chills one's enthusiasm for the conclusions of the author, despite the abundant evidence of hard work throughout the entire book.

PRINCIPLES OF PATHOLOGY. For Practitioners and Students. By H. D'Arcy Power, M.D., F.R.P.S. Professor of Pathology, College of Physicians and Surgeons, San Francisco; Dean and Professor of Medicine, San Francisco Polyclinic and Postgraduate School; and Wm. W. Hala, M.D., Assistant Professor of Pathology, Long Island College Hospital, Brooklyn, New York, Pathologist to Kings County, Carson C. Peck Memorial, and Caledonian Hospitals, Brooklyn, New York. 787 pages with 298 illustrations and many colored plates. D. Appleton and Co., New York, 1929.

This work evidently is intended as a textbook for students and as a reference book for practitioners. The pathology of diseases commonly encountered in general practice is gone into thoroughly and in a concise and usable manner, merely making reference to the rare diseases. The work is numbered by sections and the index refers to sections instead of pages. Individual cell life is discussed ably from every angle, including heredity, which is particularly interesting. For the purpose intended the book is very commendable.

OBSTETRICS: A Textbook for the Use of Students and Practitioners. By J. Whitridge Williams, M.D., Professor of Obstetrics, Johns Hopkins University; Obstetrician-in-chief to the Johns Hopkins Hospital, Baltimore. Cloth, \$10.00. Pages 1157 with 730 illustrations and 17 plates. New York, D. Appleton & Co., 1930.

This, the sixth edition, is revised thoroughly and brought up to date in those obstetric subjects where progress in knowledge has occurred. The fundamentals, such as mechanism of labor, physiology of pregnancy,

conduct of normal labor, etc., are presented excellently as in all former editions.

In the pathology of pregnancy where much added information has been obtained, the text has been rewritten quite thoroughly. Likewise the newer types of obstetric forceps and forceps deliveries come in for their proper share in discussion.

The newer types of Cesarean Section are discussed thoroughly, illustrated and evaluated, so that the reader is enabled to inform himself readily as to the progress being made in abdominal deliveries.

This book still carries a rather extensive section (88 pages) on anatomy and also on "Physiology and Development of the Ovum" (102 pages). This latter section goes greatly into details on embryology, although most medical schools are now requiring embryology as an admission subject. This means that of the 1157 pages in the book, 190 pages are given over to the two sections of anatomy and embryology.

As a whole the book contains much less theory and much more of the practical facts of obstetrics than any of the previous editions.

Extensive bibliography is used, thus aiding the reader to go much further into the details of practically every subject mentioned. It also is indexed very completely. These facts, coupled with the acknowledged authority of the author, place this book in top ranks of all obstetric texts and reference books.

NERVOUS INDIGESTION. By Walter C. Alvarez, M.D., Associate Professor of Medicine, University of Minnesota. Price \$3.75. Paul B. Hoeber, Inc., New York, 1930.

Rarely indeed have we seen so readable a book on a strictly medical subject. "Nervous Indigestion" evidently is intended strictly for the profession. There is no doubt whatever that it is technically accurate and yet it reads like a novel. The reviewer is not capable of passing a final opinion upon a book on this subject, but he is very free to say that in his opinion such splendid common sense cannot be very far wrong. We can recommend this little volume to the profession most heartily. Certainly the general practitioner will find it a gem, but for that matter we hardly can believe that there is a single specialist who will not find in it a great deal of information which he can use in his own practice. It is to be hoped that other authors will attempt to put into such readable form the particular conditions which fall within their range. We could use a whole library full of books like this.

GROW THIN ON GOOD FOOD. By Luella E. Axtell, M.D. Funk & Wagnalls Company, New York and London, Publishers. 319 pages. Stiff back binding. Price \$2.00.

This is a book for the layman and is on a subject which a great many people think is more important than anything else, namely, how they shall become thin. The book has the advantage of having been written by a physician and should therefore be somewhat more reliable than if written by a layman. We, however, cannot approve of the basic principles upon which the book is founded. The author evidently regards being thin as an ideal condition. She frequently refers to "hideous" fat, also to "horrible fat". These hardly would be appropriate terms for any save strictly pathological conditions and we cannot believe that pathological obesity would be corrected by the system of diet which she recommends.

She has a good chapter on the fallacies concerning reducing and we have no doubt that the diets which she prescribes really in many cases will cause persons to lose fat. We object, however, to the fact that she seems to be thinking only about women who would have little else to do than worry about their fat. We wonder what would happen to the children in the families where the wife and husband were on these diets. It is highly significant that so far as we can find no consideration has been given to the fact that most women do have families to consider. She specifically says, for example, that one should not be thinking constantly about good foods. This, it seems,

would be rather hard on the younger members of the family if the mother did not give consideration to the preparation of highly nutritious menus.

She refers to the great desirability of growing younger every day. It would seem to a mere bystander that people with responsibilities would wish to grow more mature. There are a few illustrations in the book that do not in the least add to its value and may be classified as being juvenile. In other words, this is just another book on reducing diets. It has gotten so that most people seem to think that a menu should be a prescription. Personally we think the whole business is wrong. Persons who need a diet for the purpose of reducing need the personal attention of their family physician. Even though this book is written by a physician, we cannot tell from the title page whether she is entitled to an opinion or not. Furthermore, she is writing a book which will be interpreted not by a physician but by a layman who possibly knows nothing at all about nutrition. We cannot recommend it.

OUTLINE OF PREVENTIVE MEDICINE. For Medical Practitioners and Students. Prepared under the Auspices of the Committee on Public Health Relations, New York Academy of Medicine. 398 pages, soft back binding. Paul B. Hoeber, Inc., New York, Publishers. Price \$5.00.

Ordinarily we do not care particularly for a book that is a compilation written by a number of contributors. It usually is very difficult for the editor to hold the various authors to uniform style and form. The present volume is, however, a very agreeable exception to the rule. We do not see how this book could have been written in any other way than by the assistance of a number of authors in the various lines. Altogether twenty-one authors have contributed. Each has discussed a number of phases of his particular specialty and has pointed out means by which disease may be avoided. The book is written strictly for the medical man and is evidently intended to lie on his desk where it may be consulted easily while advising patients in keeping well. The book is concise, especially well printed and bound; it has very attractive type and paper and the various headings stand out prominently so that it will be an easy book to consult. The high quality of the various contributors assures us of the accuracy of the text material. We can recommend this book very heartily to the profession.

DIETETICS AND NUTRITION. By Maude A. Perry, B.S. The C. V. Mosby Company, Publishers. Stiff back binding. Price \$2.50.

We have here a dietetics arranged strictly for physicians and nurses rather than for the general public. It contains a large amount of information which is presumably accurate. A great many special diets are outlined as, for example, for feeding of diabetics; for the tuberculous; for those with stomach abnormalities, etc., through the entire list of special diets. At the end of each chapter there are a number of excellent questions for the purpose of calling to the attention of the reader or the student certain particularly significant points. We can recommend it.

PERSONAL AND COMMUNITY HEALTH. By Clair Elsmere Turner, M.A., Dr. P. H. Professor of Biology and Public Health in the Massachusetts Institute of Technology. Stiff back binding. 429 pages. Price \$2.75.

We have here a textbook on an important subject by a well-known authority. The book is well printed and arranged and is entirely accurate so far as we have been able to detect. It covers in an elementary way a wide variety of health subjects. It is unlikely that anyone except those teaching a class in hygiene would be interested particularly in seeing the book, but as a textbook it certainly would be most useful in classes for which it was intended.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

The following products have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in New and Nonofficial Remedies:

GAS-GANGRENE ANTITOXIN (COMBINED) REFINED AND CONCENTRATED-P., D. & Co.—An antitoxic serum prepared from the toxins of *B. perfringens* (*B. welchii*) and vibrin septique. The quantity of the finished product in the marketed syringes contains 100 units of each antitoxin. It is proposed for therapeutic use against gas-gangrene infection caused by *B. perfringens* and vibrin septique. It is marketed in syringes containing 100 units of perfringens antitoxin and 100 units of vibrin septique antitoxin. Parke, Davis & Co., Detroit.

INHALANT CHLORETONE, CREOSOTE AND EUCALYPTOL-SORENSEN.—It contains chloretone (New and Nonofficial Remedies, 1930, p. 115), 1.2 Gm. (20 grains); creosote, 2.5 cc. (40 minims); eucalyptol, 3.75 cc. (60 minims); alcohol to make 30 cc. (1 fluid ounce). C. M. Sorensen Co., Inc., Long Island City, New York.

SOLUBLE GELATIN CAPSULES PARKE, DAVIS & COMPANY'S STANDARDIZED COD LIVER OIL, 10 MINIMS.—Each capsule contains ten minims of Parke, Davis & Company's Standardized Cod Liver Oil (New and Nonofficial Remedies, 1930, p. 256). Parke, Davis & Co., Detroit.

SOLUBLE GELATIN CAPSULES PARKE, DAVIS & COMPANY'S STANDARDIZED COD LIVER OIL, 20 MINIMS.—Each capsule contains 20 minims of Parke, Davis & Company's Standardized Cod Liver Oil (New and Nonofficial Remedies, 1930, p. 256). Parke, Davis & Co., Detroit.

SOLUBLE GELATIN CAPSULES PARKE, DAVIS & COMPANY'S STANDARDIZED COD LIVER OIL, 2.5 GM.—Each capsule contains 2.5 Gm. Parke, Davis & Company's Standardized Cod Liver Oil (New and Nonofficial Remedies, 1930, p. 256). Parke, Davis & Co., Detroit.

SOLUBLE GELATIN CAPSULES PARKE, DAVIS & COMPANY'S STANDARDIZED COD LIVER OIL, 5 GM.—Each capsule contains 5 Gm. of Parke, Davis & Company's Standardized Cod Liver Oil (New and Nonofficial Remedies, 1930, p. 256). Parke, Davis & Co., Detroit.—(*Jour. A. M. A.*, September 6, 1930, p. 729).

QUININE BISMUTH IODIDE.—A substance of variable composition containing between 18 and 20.1 percent of bismuth, between 48.7 and 53.5 percent iodine; and quinine. Quinine bismuth iodide is proposed as a means of obtaining the systemic effect of bismuth in the treatment of syphilis.

SODIUM POTASSIUM BISMUTHYL TARTRATE.—A basic sodium potassium bismuth tartrate containing from 40.75 to 41.25 percent of bismuth. It is proposed as a means of obtaining the systemic effects of bismuth in the treatment of syphilis.

TARTRO-QUINIOBINE.—A suspension of quinine bismuth iodide and sodium potassium bismuthyl tartrate in olive oil, each cubic centimeter containing quinine bismuth iodide, 0.072 Gm., sodium potassium bismuthyl tartrate, 0.032 Gm., and camphor, 0.003 Gm. It is proposed as a means of obtaining the systemic effects of bismuth in the treatment of syphilis. It is designed to secure both early action through the presence of water-soluble sodium potassium bismuthyl tartrate, and prolonged action through the insoluble quinine bismuth iodide. It is supplied in two cubic centimeter ampules. Spicer & Co., Glendale, California.—(*Jour. A. M. A.*, September 13, 1930, p. 797.)

OLD TUBERCULIN, HUMAN STRAIN, CONCENTRATED (New and Nonofficial Remedies, 1930, p. 360).—This product is also marketed in packages of two vials, one containing a stated amount of tuberculin and the other sufficient diluent to make six dilutions. Eli Lilly & Co., Indianapolis.

CHINIOFON-SEARLE.—A brand of chiniofon-N. N. R. (New and Nonofficial Remedies, 1930, p. 120). It is also marketed in the form of 0.25 Gm. (4 gr.) tablets. G. D. Searle & Co., Inc., Chicago.—(*Jour. A. M. A.*, September 20, 1930, p. 865).

PLANT'S MAGNESIA WAFERS.—Wafers, each containing magnesium hydroxide 0.3 Gm. (4.64 grains) compressed with the addition of sucrose and starch and essential oils as flavors. Used as an alkaline laxative and antacid. The magnesium content of each wafer is approximately equivalent to that of four cubic centimeters of magnesia magma U. S. P. Plant Products Co., Cleveland, Ohio.—(*Jour. A. M. A.*, September 27, 1930, p. 935.)

FOODS

The following products have been accepted by the Committee on Foods of the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in Accepted Foods:

KIDDIE KANNED VEGETABLES, FRUITS AND CEREALS (Kiddie Kanned Foods, Inc., Seattle, Wash.)—Canned cooked and sieved vegetable soup, oat porridge, wheat porridge, spinach, tomatoes, carrots, apples and peaches. They contain no added salt or sugar. To prepare these products the vegetables and fruits are washed, cooked under pressure to soften for sieving. The hot sieved foods are packed in cans, sealed and processed. Crushed oats and wheat are cooked under pressure, sieved, packed hot, and processed.

HORLICK'S MALTED MILK LUNCH TABLETS (Plain and Chocolate Flavored) (Horlick's Malted Milk Corporation, Racine, Wis.)—These are Horlick's Malted Milk, plain and chocolate flavored, compressed into tablets.—(*Jour. A. M. A.*, September 20, 1930, p. 865.)

ACCEPTED DEVICES FOR PHYSICAL THERAPY

The following has been accepted by the Council on Physical Therapy of the American Medical Association for inclusion in its list of accepted devices for physical therapy:

MALTESE X-RAY LEAD GLASS.—Maltese X-ray Lead Glass (Semon Bache & Co., New York) is a lead glass designed for x-ray protective shields. Measurements of the protective qualities of several samples were made by the Bureau of Standards and were satisfactory.—(*Jour. A. M. A.*, September 20, 1930, p. 865.)

PROPAGANDA FOR REFORM

AMBRUSTER, RUSBY—AND ERGOT.—For almost three years one Howard W. Ambruster, an importer of ergot, with the advice of H. H. Rusby, has charged vociferously, repeatedly, frantically, that the fluidextract of ergot U.S.P. of American manufacture was grossly substandard. Controlled scientific evidence from creditable sources to sustain the charges has not been presented. In innumerable circular letters, in broadsides, in statements to the press and wherever he can get a hearing, Mr. Ambruster asserts there is a conspiracy on the part of the American Medical Association and of the Food, Drug and Insecticide Administration of the U. S. Department of Agriculture to approve substandard drugs. Not only has the American Medical Association as an organization been attacked, but various officials have been subjected to Ambruster's diatribes. Moreover, the American Pharmaceutical Association, the office of the Secretary of the Treasury, many pharmaceutical houses, the office of the Secretary of Agriculture, the U. S. P. Revision Committee and others have been included. The campaign which Ambruster has waged and continues to wage would command admiration if there appeared to be any sincerely altruistic motive for it. But there appears to be no evidence to substantiate his charges. Both the Council on

Pharmacy and Chemistry and the *Journal of the American Medical Association* have reported on two different occasions that there was no evidence that fluidextract of ergot U.S.P. as found on the market should not be used with confidence by American physicians. Last June the Committee on Agriculture of the United States Senate held hearings on the Ambruster charges. The evidence permitted to go into the record was not limited to the "indictment." Members of the medical profession and officials of the American Medical Association were accused grossly by Ambruster and Rusby. While a definite report has not been made by the Senate Committee as a whole, the impression created on the technical members of the committee and apparently shared by most of the nontechnical members was summarized fairly well by comments made by Senators Copeland and Hatfield in the closing days of the hearing. Senator Copeland held that no evidence has been presented to show that the quality of fluidextract of ergot was a menace to mothers in childbirth and that he had not heard any testimony to show that the government officials had been lax in their enforcement of the law.—(*Jour. A. M. A.*, September 6, 1930, p. 722.)

THE AMBRUSTER ERGOT SITUATION.—During recent years, one Howard W. Ambruster has conducted a campaign against the Food and Drug Administration of the United States Department of Agriculture and against the officials of the American Medical Association. In his campaign Mr. Ambruster has alleged repeatedly that there exists a conspiracy between the government department and the American Medical Association to approve substandard drugs, particularly ergot. Mr. Ambruster is in the ergot business. Such investigations as have been made prove that the charges of Mr. Ambruster are entirely without foundation. The vast majority of the ergot on the market is dependable and there has been no increase in deaths from puerperal hemorrhage. The government department attacked seems to have been operating with exceptional efficiency.—(*Jour. A. M. A.*, September 6, 1930, p. 730.)

EPHEDRINE AND HABIT FORMATION.—An article appeared in a recent issue of the *Ladies' Home Journal* in which it was stated that ma huang is related closely to cocoa and that it is as dangerous as the narcotics of the cocoa group. It stated: "Ma huang * * * has cocaine's effects—it is exhilarating, habit forming, deadly." Chen and Schmidt in a recent monograph, "Ephedrine and Related Substances" state that investigators appear to agree that the prolonged use of ephedrine does not have any cumulative harmful effects and does not result in habit formation. In New and Nonofficial Remedies no reference is made to habit-forming properties of the drug. A search of the *Quarterly Cumulative Index Medicus* fails to reveal published articles on ephedrine as a habit-forming drug. Though it is known that the actions of ephedrine on the central nervous system resemble considerably those of cocaine, it is not believed that these are sufficiently pleasant to be a temptation; certainly the effects cannot be at all serious, or they would have become apparent before this. In a recently published report of the effects of ephedrine on animals it is stated that in humans after prolonged use against asthma, it produced euphoria, and reports where the drug had to be discontinued on account of unpleasant stimulation. The absence of clinical reports of addiction does not substantiate the careless references of popular writers to habit formation. The available evidence indicates that there is little if any danger of ephedrine becoming a serious habit former.—(*Jour. A. M. A.*, September 6, 1930, p. 731.)

TWO MINOR MAIL-ORDER FRAUDS.—Chinese Herb Co. of San Francisco and Webb Co., Springfield, Illinois, have been debarred from the mails. The Chinese Herb Co. sold "herb treatments" through the mails for the alleged cure of practically all diseases and ailments. The Webb Co. sold through the mails a mechanical device called the "Adjustor", sold under the claim that it would develop the male sexual organ.—(*Jour. A. M. A.*, September 6, 1930, p. 745.)

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the Food, Drug and Insecticide Administration of the United States Department of Agriculture which enforces the Federal Food and Drugs Act: Fulton's Compound R1 and R2 (John J. Fulton Co.), consisting essentially of sodium and calcium compound, nitrates, sulphates, borates, extracts of plant drugs including bearberry, a laxative drug, licorice, salicylic acid, a trace of alkaloids, alcohol and water. Donnell's Indian Vegetable Oil (C. K. Donnell, M.D.), consisting essentially of cotton seed oil containing volatile matter, including over 22 minims of chloroform to the fluid ounce, together with oil of peppermint and camphor. Hyland's 14 (Standard Homeopathic Co.), consisting essentially of milk sugar, with traces of potassium iodide and extracts of vegetable drugs including gelsemium.—(*Jour. A. M. A.*, September 6, 1930, p. 745.)

VENTRICULIN.—The Council on Pharmacy and Chemistry publishes a preliminary report of Ventriculin. It was presented by Parke, Davis & Co. for consideration by the Council as a preparation of desiccated stomach tissues useful in the treatment of pernicious anemia. The Council has postponed definite action in regard to the acceptance of Ventriculin to await (1) presentation by Parke, Davis & Co. of a definitely standardized method of preparation for the product, (2) justification of the name, including a signed statement by Doctors Sturgis and Isaacs concerning the discovery of the use of stomach tissues in the treatment of pernicious anemia, and (3) presentation of adequate clinical evidence for the efficacy of the product in the treatment of pernicious anemia.—(*Jour. A. M. A.*, September 13, 1930, p. 797.)

THE MANAGEMENT OF OPIUM ADDICTION.—Many of the so-called specific cures have been given fair trial by critically minded observers, but the results have been consistently unconvincing. This applies to rationally conceived proposals as well as to exploited products like "Narcosan" or the alleged secret Kahle treatment discussed in the German medical press. The conclusion of a British reviewer seems to be justified that it is now realized more thoroughly than ever before that the major problem is not to free the addict from his drug but to keep him free. Morphine addiction is not characterized by physical deterioration or impairment of physical fitness. Herein lies the hope that rehabilitation by any process may be satisfactory so far as the physiologic functions are concerned. The mental and psychologic problems are not yet so easily disposed of. Relapse is common to all methods of treatment and the question as to whether the withdrawal of the alkaloid should be gradual rather than abrupt may be discussed in the light of many reports. British opinion, with a few exceptions, seems to be in favor of a reduction treatment as the routine method of cure.—(*Jour. A. M. A.*, September 13, 1930, p. 801.)

POLYGLANDOL AND POLYGLANDINE.—The Rand-McNally Building in Chicago has two entrances: one at 538 South Clark Street and the other at 529 South LaSalle Street. For some years there have been exploited from a suite of offices in this building some crude mail-order quackeries, carried on under a variety of firm names and with a still greater variety of nostrums. While there probably are several persons connected with the business, the most important factor seems to be one Frank H. Ellenbaum. Some of the names used by Ellenbaum and his associates are: Science Publishing Co., Inc., 538 South Clark Street; Advisory Service Bureau, 538 South Clark Street; Medical Aid Bureau, 529 South LaSalle Street; Home Health Bureau, 538 South Clark Street; George R. Douglass, 527 South LaSalle Street; Medico Electro Company, 536 South Clark Street. The "Advisory Service Bureau" puts out two aphrodisiacs, Polyglandol and Polyglandine for men and women, respectively. The A. M. A. Chemical Laboratory examined these nostrums because a report was received that a bull terrier who devoured a package of Polyglandol mailed to an old gentleman who had ordered it had died of arsenic poisoning. The Laboratory did not find the Polyglandol now marketed to contain appreciable amounts of

arsenic. It found Polyglandol to resemble in composition the so-called aphrodisiac pill and Polyglandine to resemble somewhat one of the numerous so-called iron- tonic pills. The chief indictment against the business run by Ellenbaum *et al.* is the suggestiveness and general salaciousness of the advertising, together with the wholly unwarranted claims leading sexual hypochondriacs to believe that they can be rejuvenated by the various named nostrums put out by the equally various named concerns.—(*Jour. A. M. A.*, September 13, 1930, p. 814.)

THE GALVANO NECKLACE FRAUD.—On July 11, 1916, one branch of the United States government—the Patent Office—issued a patent on a preposterous piece of unscientific hokum, on the ground that it was a "new and useful improvement in appliances for treating goiter." On August 14, 1930, another branch of the government—the Post Office Department—declared the same device worthless and its method of exploitation a fraud and debarred it from the mails. The device was known as the "Galvano Necklace" or "Galvano Goiter Appliance"; it was sold by the Cosmas Pharmacal Co. of Watertown, Wisconsin. The Galvano Necklace consists of glass beads between which are placed alternately small zinc and copper discs. Both the discs and beads are strung on a piece of fine wire. The alleged purpose of the "invention" is that of "generating galvanic currents in contact with the skin in the presence of mercurous iodide and calcium chloride." With the necklace came an ointment containing mercurous iodide and calcium chloride, which was to be applied to the skin of the neck, and the necklace then hung so that that part carrying the zinc and copper discs would come in contact with the anointed skin. In addition to the necklace the Cosmas Co. has been sending out, in addition to the "ointment," one-half grain potassium iodide tablets. The danger of allowing people with hyperthyroidism to dose themselves with potassium iodide unknowingly is not obvious to the public, although it is to physicians. When the necklace was tested in the Bureau of Standards it failed to disclose any electric current. A fraud order was issued by the Postmaster General against the Cosmas Pharmacal Co., W. Werner, and their officers and agents, as such.—(*Jour. A. M. A.*, September 20, 1930, p. 882.)

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the Food, Drug and Insecticide Administration of the United States Department of Agriculture which enforces the Federal Food and Drugs Act: Hollie's Reducing Crackers (Cubbison Cracker Co., Inc.), essentially a brown wheat cracker containing senna and mineral oil; Cold Fix Tablets (Cold Fix Company), tablets containing about one grain acetanilide (each) with some cinchonine sulphate, aloin and camphor; Campho-Quinine (Gorgan Remedy Co.), tablets consisting essentially of acetanilide with a small amount of a quinine salt, camphor and an extract of a laxative plant drug; Fluin (The Fluin Company), consisting essentially of camphor, amidopyrine, and a compound with a hexamethylenetetramine nucleus; Ampco Laxative Cold Tablets (American Drug Sales Co.), containing one grain of acetanilide (each), together with red pepper and an extract of a laxative plant drug; Forkola Jell (Bacorn Co.), an ointment consisting essentially of a petrolatum base containing benzoin and oils of peppermint, eucalyptus, with camphor, menthol, turpentine oil and oil of wintergreen; Casco Cascara Bromide Quinine Laxative Tablets (Casco Company), containing acetanilide, phenolphthalein, quinine, extracts of plant drugs including a laxative drug and a trace of bromide; Yago One Day Cold Tablets (L. J. Barnett Co.), consisting essentially of acetanilide, a quinine compound, resins, aloin, extracts of plant drugs, including a laxative drug and traces of mydriatic and ipecac alkaloids.—(*Jour. A. M. A.*, September 20, 1930, p. 882.)

ANTIPNEUMOCOCCUS SERUM COMBINING TYPES I AND II PNEUMOCOCCI, AND REFINED AND CONCENTRATED ANTIPNEUMOCOCCIC SERUM (LEDERLE) NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that it has accepted for New and Non-official Remedies preparations of antipneumococcic serum for type I pneumococcus infection and that at present

this is the only type in which the efficacy of serum has been established sufficiently to warrant general use. The Council reports that there is some evidence that type II serum concentrated by the Felton method is of service if given early and in large doses, but that there are other reports which indicate inefficacy. In consideration of the present available evidence, the Council declared all serum preparations combining type I and type II pneumococci, including Refined and Concentrated Antipneumococcic Serum (Lederle) unacceptable for New and Nonofficial Remedies.—(*Jour. A. M. A.*, September 27, 1930, p. 935.)

STEVENS CONSUMPTION CURE.—In 1904 C. H. Stevens was selling "Sacco" in Capetown, South Africa. When clearing \$15,000 a year, he got into the courts and found it expedient to leave Capetown. In 1906 Stevens was in Johannesburg, trading as the "South African Institute of Medicine" and selling his stuff as "Lungsava"; was twice convicted of violating the law and left for England. In 1907 Stevens was in London selling his "cure" and in 1910 was declared by the courts to be guilty of "intentional and well-considered fraud" and his "cure" denounced as "nothing but quack remedies." In 1908 the British Medical Association denounced Stevens as a quack and declared his nostrum worthless. In 1915 Stevens' "cure" appeared in the United States under the name of "U. C. Extract," exploited by the Umckaloabo Chemical Company of New York City. In 1919 Stevens attempted to exploit tuberculous Canadian soldiers who have acquired the disease in the service of their country. The Post Office authorities investigated the Stevens business and have issued a fraud order against Charles H. Stevens, of London, England.—(*Jour. A. M. A.*, September 27, 1930, p. 951.)

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the Food, Drug and Insecticide Administration of the United States Department of Agriculture which enforces the Federal Food and Drugs Act: Palatol (Parke, Davis & Company of New York City), consisting essentially of cod liver oil, malt, wild cherry, phosphates, cholesterol, alcohol, sugar and water. Halanum (The Radium Research Foundation), containing no radium and being in fact essentially a weak solution of common salt in water; Eleven Bros. Tonic (Eleven Bros. Laboratories, Inc.), consisting essentially of epsom salt, iron chloride, alcohol and water, flavored with peppermint; Phenyo-Caffeine (The Phenyo-Caffeine Company), consisting essentially of acetanilide, caffeine and camphor; Fenholloway Sulphur Springs Water (A. E. Jackson), containing a filthy animal and vegetable substance; Bel-Caps (W. E. Shuit), containing ammonium, iron and calcium compounds, sulphates, carbonates, chlorides, bromides, camphor, aloin, small amounts of alkaloids and plant extractives, including a laxative drug. EfeDron Hart Nasal Jelly (The Hart Drug Corporation), consisting essentially of a mucilaginous mass containing ephedrine hydrochloride, chlore-tone, carbolic acid, salt and water flavored with oil of cinnamon; Crane's Laxative Quinine Cold Tablets (The Crane Medicine Company), each tablet containing eight-tenth grain of acetanilide with quinine and cinchonine salts and a laxative plant drug; Bromoline (The Senoret Chemical Company), consisting of coated tablets containing acetanilide, cinchonine sulphate and resinous plant material; Grip-Sules (Kingsbury and Frick), capsules containing about one and one-half grains of acetanilide, about one-third grain of caffeine, a quinine compound and a pungent drug, such as red pepper; Numoss (The C. R. Products Company), consisting of ammonium chloride, creosote and Irish moss, flavored with oil of anise; Hogan's Old Reliable Cough Syrup (Hogan's Old Reliable Cough Drops, Inc.), consisting essentially of ammonium chloride, red pepper, chloroform, extracts of plant drugs, including licorice, squill, wild cherry and senega, with alcohol, sugar and water, and flavored with oil of anise.—(*Jour. A. M. A.*, September 27, 1930, p. 951.)

ABSTRACTS

EARLY DIAGNOSIS AND EARLY CARE OF PULMONARY TUBERCULOSIS

GERALD B. WEBB, Colorado Springs, Colo. (*Journal of the A. M. A.*, June 1, 1929), asserts that roentgen examination is the only method available for detecting early pulmonary tuberculosis. The early lesions of tuberculosis discovered by roentgen examination are not usually accompanied by marked symptoms of disease. However, the well-known methods of physical examination must not be neglected. Percussion of the bases of the lungs by the tips of all fingers (Auenbrugger) is helpful in basal lesions, and in apical lesions ambidextrous percussion should be employed. Change in vocal resonance is best determined by the application of the backs of the fingers to the chest. Trachea deviation, detected by palpation, will frequently direct attention to a diseased lung. Auscultation, to elicit changed type of breathing and also rales, should be practiced over the entire chest, first when the patient is breathing quietly, and then while the patient inhales, exhales and gives one short sharp cough at the end of expiration. Rales are usually heard with the beginning of the next inspiration. Careful history taking is of the greatest importance. The examination of each patient suspected of having tuberculosis should be general and thorough. The ear, larynx, testicles, eyegrounds, anus, abdomen and lymph nodes, especially the cervical, should all be investigated. Suspected patients must be placed at rest for at least ten days while the temperature and pulse are carefully studied. Specimens of sputum should be submitted to competent laboratories for examination and, if at first negative, a number of specimens should be studied. If the reports are repeatedly negative and roentgenographic evidence is also negative, such diseases as the following should be considered in regard to differential diagnosis: accessory sinus disease with associated bronchitis, hyperthyroidism, intestinal parasites, chronic tonsillitis, aspergillosis, streptothrix and other unusual infections. Pulmonary tuberculosis with an acute onset may be mistaken for typhoid or other fevers. The diagnosis of pulmonary tuberculosis having been made, the patient should be put to bed for an indefinite period, preferably in a sanatorium in the home state. Rest of body and mind is the only specific remedy yet available for the arrest and cure of pulmonary tuberculosis. Physicians attending tuberculous patients must be unusually resourceful in maintaining morale and hope. Patients must continue the rest regimen for many months after all symptoms such as cough and fever have subsided. Pulmonary tuberculosis has a great tendency to relapse. Two or three years of the most careful observation are necessary in all patients with pulmonary tuberculosis, and this includes patients who have had pleurisy with effusion.

INTRAMUSCULAR INJECTION OF ADULT WHOLE BLOOD AS PROPHYLACTIC AGAINST MEASLES

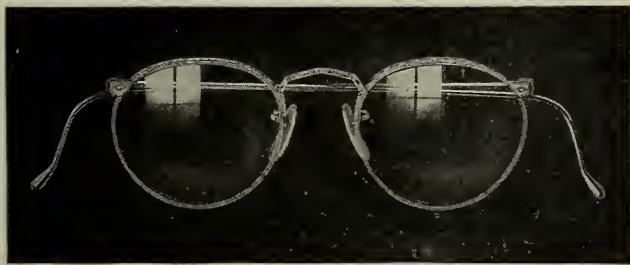
In a series of thirty patients from six to forty-two months of age reported on by GEORGE B. BADER, New York (*Journal of the A. M. A.*, August 31, 1929), from 20 to 30 cc. of whole blood of persons recovered from measles from two to twenty-five years previously (except in one case in which 10 cc. was used from a cousin three months' convalescent) was given intramuscularly. This blood, which was given within the first seven days following exposure, completely protected twelve patients, so far as escape of measles is proof of protection, and was

(Continued on Adv. Page xx)



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J12

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ABSTRACTS

(Continued from page 564)

followed in nine by a modified and attenuated measles without catarrhal symptoms. In eight patients, mild catarrhal symptoms were present. One child had measles of moderate severity and she was the only one of the thirty known to have had Koplik's spots and a typical eruption. In the others in whom eruptions were present they were not characteristic. There was a distinct modification of the temperature except in two instances. There seems to have been a prolongation of the incubations in all except possibly four. There were no complications. He concludes that whole blood from adults long recovered from measles is an effective measure against measles. This report is suggestive and other similar reports in the literature lend corroborative evidence of the validity of the measure as a weapon to use to minimize the dangers from measles. It might be particularly efficacious for institutions where many cross-infections are often to be found when the serum from recently convalescent patients is not readily available, or in the age group under five years, in which 90 percent of the deaths from measles occur, or in the weak and debilitated in whom the presence of measles might determine a fatal issue. If the disease could be prevented or modified in those instances, many lives might be saved and the mortality from measles appreciably reduced.

ATROPHY OF LIVER DUE TO CINCHOPHEN PREPARATIONS

After reviewing numerous cases reported in the literature, MEYER A. RABINOWITZ, New York (*Journal A. M. A.*, Oct. 25, 1930), reports seven new cases. He stresses several points: Cinchophen preparations may pro-

duce liver damage of varying severity to fatality. This danger cannot be avoided by small doses, intermittent use, large amounts of fluid or associated use of sodium bicarbonate. Since cinchophen is not a specific for arthritis, gout, myositis, neuritis or allied states, indiscriminate use and counter prescribing is dangerous, and the drug or its congeners should not be used in cases difficult of careful control and observation. All cinchophen preparations and congeners should have their content advertised and noted on the container in which they are dispensed. Protein sensitization of the liver may be responsible for the subsequent production of the liver damage by cinchophen. Research work is needed to determine the factors in the production of liver damage and to prevent this dangerous effect.

STUDIES IN INFANT NUTRITION

JESSE R. GERSTLEY, Chicago (*Journal A. M. A.*, Oct. 25, 1930), states that chemical studies show that: 1. Lactose added to whole boiled cow's milk does not result in diarrhea with a great increase in the excretion of acids when given to normal infants. 2. The amount of various acids excreted by the intestine does not depend directly on the amount of lactose in the diet but on various factors which are probably concerned in its absorption from the intestine. The relation of lactose to protein in the diet is of great importance. 3. In respect to certain chemical relationships in the stool, lactose seems preferable to the maltose-dextrin preparation. Chemical studies, dealing with the development of nutritional disturbance, favor the Finkelstein hypothesis that cow's milk causes a primary injury to the intermediary metabolism. Should intestinal fermentation and diarrhea develop, they are secondary and incidental to the primary disturbance of body nutrition. The severest nutritional disturbance may exist, even alimentary intoxication, without gastro-intestinal involvement.



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ORIGINAL ARTICLES

THE FORCEPS OPERATION

M. EDWARD DAVIS, M.D.

CHICAGO

The forceps operation is the most common major procedure in obstetrics. Statistics indicate that the proportion of operative interference in obstetrics is increasing steadily and with this there has been a steady rise in mortality and morbidity among mothers and babies. Indeed, there has been a general feeling that the doctors are interfering with labor entirely too often, interfering needlessly, with subsequent damage to mother or babe. This wave of criticism that is sweeping our country is apparent particularly at this time when popular opinion and thought have been directed to maternal and infant welfare. A discussion of the indications and conditions of this operation is, therefore, particularly timely.

The forceps properly used is the most useful instrument in obstetrics. There are any number of instruments in use at the present time, but we at the Chicago Lying-in Hospital have almost confined ourselves to the DeLee modification of the Simpson forceps. The modifications consist in a lengthening of the shank, an increase in size of the hooks, and a lightening and simplification of the handles to facilitate cleaning. This has resulted in a well-balanced instrument, easy to manipulate and still easier on the baby. The lengthening of the shank makes this forceps adaptable to all types of operations.

The indications for the operation will vary with the individual patient, the environment, the facilities at hand, and the abilities of the accoucheur. The doctor who must deliver the patient in her own home with little or no help necessarily must make the indications for interference unusually stringent. Conservatism in obstetrics is still the best policy because nature is still the best obstetrician. The doctor who practices in a well-equipped maternity may interfere somewhat earlier, but he too must have strict indications and conditions. We have, at the Chicago Lying-in Hospital, an out-patient service which delivers two thousand mothers per year in their own homes under conditions comparable to any poor environment. We

practice conservatism and during the forty years of its existence the results have been excellent. There are, however, a group of well-recognized indications for the forceps operation.

Failure of the powers of labor is the most frequent indication for interference. The patient probably had sufficient pains to complete the effacement and dilatation, but the pains gradually become weaker and weaker and finally give out. Perhaps the perineum is too resistant or the head a bit too large for the pelvis; in any event, nature is unable to finish her task and complete the delivery. One to two hours of good second-stage pains when the head is on the perineum, without progress, we feel to be a good indication for the termination of labor. If labor is allowed to continue indefinitely, the ideal time for the operation may pass and the patient's general condition begin to show the effects of the labor.

Failure of rotation of the occiput anteriorly under the pubis is another frequent indication for forceps. The transverse diameter of the head may come to lie in the transverse diameter of the pelvis at the mid-plane of the pelvis, high transverse arrest or on the perineum, deep transverse arrest. Labor continues hour after hour, but, due to resistance to be overcome being too great or the pains insufficient, the occiput fails to rotate out of the transverse and labor comes to a standstill. The question then arises, how long should one wait for rotation to occur. This would depend on other factors. If the head were arrested low, the cervix completely dilated and out of the way, one or two hours of labor without progress may prove a sufficient test of what can be accomplished. Then again, if it is a high arrest of the head, one hesitates to resort to a difficult forceps to complete delivery and two full hours or longer should elapse in the second stage.

The head may rotate out of the transverse and instead of rotating anteriorly, it may rotate posteriorly. Interference in occiput posteriors is much more common than in anterior positions. The labor is unusually lengthy and exceedingly painful. The cervix dilates slowly and often incompletely. The pains give out as the hours of labor increase. The general condition of the patient may begin to show the wear and tear of a long, painful labor. These and many more reasons are responsible for the high percentage of forceps deliveries in occiput

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posterior positions. And yet, one must not forget that ninety to ninety-five percent of occiput posteriors will deliver spontaneously if given sufficient time.

There are a group of indications where the doctor should resort to forceps for the benefit of the general condition of the mother. Labor often throws an unusual amount of extra work on a mother who is ill suited to bear the burden. A woman with heart disease always is a serious obstetrical problem. The second stage of labor should be eliminated whenever possible to avoid overtaxing a damaged heart. Second stage pains, bringing into play the abdominal muscles and the diaphragm, throw a big burden on the heart. Acute and chronic diseases such as pneumonia, the acute fevers, typhoid or tuberculosis, all demand the preservation of the woman's strength by making labor as easy as possible when dilatation is complete. The head well down in the pelvis, labor may be terminated gently by forceps and the woman's strength spared.

There are a group of conditions that may affect mother and babe alike, such as placenta prævia, abruptio placentæ, prolapse of the cord. Here forceps delivery may be the method of choice when all the conditions necessary for forceps have been met. The fetal heart tones serve as a good criterion of the baby's condition throughout labor. A sudden dropping of the heart rate to under 100 or a sudden increase to over 180 may mean intra-uterine asphyxia and demand rapid interference if the baby is to be saved. A drop in rate and an irregularity in rhythm is of more significance than an increase in rate. Here again the forceps may be used to extricate the baby from the dangerous position if all the conditions have been fulfilled.

Forceps in face and brow presentations are not common and unusually difficult procedures. These deflexed attitudes do not adapt themselves to forceps applications and other operations such as version or low cervical Cesarean give better results in most instances.

Forceps on the aftercoming head is becoming a more popular procedure. Many a brain hemorrhage or a tentorial tear can be saved by the rapid and judicious use of forceps in this condition. Too often is the accoucheur prone to use too much traction on the body, too much force on the head, too much rotation of the shoulders. All these may result in serious birth injuries and may be prevented by early and proper application of forceps on the aftercoming head.

Granted that the indication for terminating labor be present, then one must consider the conditions. A successful forceps delivery depends on all the necessary conditions being present. When we violate this cardinal principle, the mother or baby, or both, may suffer. In the first place, there must be no great disproportion between the fetal head and the pelvis. If the head is well engaged in the pelvis or on the pelvic floor, there can be

little doubt of any serious disproportion except at the outlet. A narrow outlet often serves as a serious obstacle to delivery. Careful measurement of the distance between the external ischial tuberosities will give an accurate idea of the transverse diameter of the outlet, which is the most important diameter. If the head is at the midplane of the pelvis or higher, the evaluation of the comparative size of the head and the pelvis becomes more important and more difficult. It is poor obstetrics to resort to the forceps as an instrument of trial attempting to pull a head through a pelvis too small to admit of its passage. A careful vaginal examination before the application of the blades usually will determine the size of the head and pelvis. The high forceps operation where the blades are applied to a head that is floating or just at the inlet has fallen into disfavor and properly so. The dangers and damages of this operation are alarming. In our own clinic the high forceps operation is used only as a means of trial—to see if the head will enter the pelvis with very moderate tractions. Failing in this, the blades are removed and the case terminated in a more humane way.

The cervix must be effaced and dilated completely. This condition must always be insisted upon to avoid serious dangers. How often has a doctor applied forceps to a head when the cervix would not admit of its passage. Then traction is made with the hope that the cervix will stretch sufficiently. There is some elasticity in the normal cervix but certainly not sufficient for it to do what many obstetricians expect of it. The inevitable results happen. The cervix tears often into the bases of the broad ligaments; the supports of the bladder and the uterus are stretched and loosened. This may result in cystocele, rectocele and displacements of the uterus. The patient may suffer for years as a result of these childbirth injuries, returning to the gynecologist for an extensive operation. The serious damage to the baby caused by prolonged tractions in trying to overcome a resistant cervix often may prove fatal to it.

Occasionally the exigencies of the case demand rapid delivery by forceps. On examination the cervix is effaced but not completely dilated. There are several means at hand to complete the dilatation. If there is ample time, a large Vorhees bag may be inserted into the lower uterine segment. When the bag has passed through the cervix, there will be sufficient dilatation for the passage of the head. The colpeurynter is especially useful in long labors with little progress due to uterine atony. Should haste be necessary, the cervix may be incised for a distance of two or three centimeters. These incisions, Dührssen's incisions, are best made corresponding to the ten, two and six on the clock, these locations avoiding the uterine arteries and ureters should extensions occur. The only condition necessary for these incisions is complete effacement of the cervix. Should effacement be incomplete, the danger to important

organs is too great. These clean-cut incisions can be repaired easily in clean cases.

Forceps should not be done on a dead child. Craniotomy is a safer and more humane operation. It saves the pelvic structures by reducing the size of the fetal head. There is little glory in delivering a dead child by forceps at the expense of extensive maternal lacerations.

Except in rare cases, the head should be engaged in the pelvis. The membranes should be ruptured.

The success of the forceps operation depends largely on an accurate diagnosis of the position of the fetal head. A cephalic application of the blades is always made and wherever possible the occiput should be directly under the symphysis. Inasmuch as the blades are always applied to the sides of the head, biparietal application, regardless of what position the head occupies in the pelvis, one must always know where the small fontanel is in reference to the symphysis. An accurate examination of the suture lines, the small fontanel, and the occiput will give the exact position of the head. Fifteen or twenty degrees to the right or left of the symphysis can be corrected easily during the first traction. If the occiput is in one of the obliques, it may be necessary to rotate the head gently with the forceps, five or ten degrees at a time, then gently readjust the blades until the occiput comes to lie directly under the symphysis before traction is made. Traction should not be made until the head is in the antero-posterior position and the occiput directly under the symphysis. A transverse arrest of the head or an occipito-posterior position demands rotation of the occiput to the front manually or by forceps and the application of the blades to the sides of the head in the anterior position.

One may fail to secure complete anterior rotation manually and yet be able to rotate the occiput to the transverse or beyond it. This act accomplishes considerable, and complete rotation may be secured with the aid of the forceps. The "key-and-lock" maneuver of DeLee, to be described, is particularly easy when the occiput has been rotated to the transverse or beyond it.

With the occiput posterior in the right oblique, the forceps are applied in the transverse of the pelvis. This grasps the head in an unfavorable diagonal manner and all motions must be made very gently. With the slightest possible compression the head is now pushed up about two centimeters in the axis of the birth canal and gently twisted so that the small fontanel is rotated no more than five degrees. The head is then pulled down a little in the axis of the pelvis. These motions are repeated several times until the occiput comes to lie in the transverse plane of the pelvis. Now the blades are gently adjusted without being removed so they too come to lie in the transverse plane and fit the sides of the head. The gentle maneuvers consisting of a combination

push, twist, and pull motion are repeated. As the occiput travels anteriorly, the blades are readjusted gradually so they fit the sides of the head securely. Four or five readjustments of the blades may be necessary until finally the occiput comes to lie under the symphysis and the forceps applied directly to the sides of the head. Now and not before this moderate traction may be made and the head delivered.

Occasionally it is impossible to effect rotation manually or with the aid of the forceps, and then it becomes necessary to deliver the baby as an occiput posterior. The forceps are applied in the usual manner and the head is delivered very slowly, acute flexion being maintained at all times to present the most favorable diameters to the pelvis. A very deep episiotomy should be the rule because extensive damage to the perineum and sphincter muscle may result.

Episiotomy is the rule in primiparæ and in multiparæ who have resistant perineæ. A medio-lateral episiotomy will spare the perineal structures and facilitate delivery. It is much easier to repair the fascias and muscles of the perineum if they have not been lacerated and stretched. Healing is more rapid and the results good.

THE DIAGNOSIS OF MALIGNANT DISEASE OF THE COLON AND RECTUM*

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Intestinal dysfunction, no matter how mild, demands careful investigation. This syndrome has received all too scant consideration in medical textbooks. When every unusual intestinal irregularity is brought to the attention of a physician who inquires carefully into its nature and cause, many serious organic diseases of the large intestine will be halted in their incipency, or at least attacked at a time when curability seems likely.

Malignant disease of the large intestine often begins in a most insidious manner and until more of the early symptoms and signs of intestinal carcinoma become apparent it behooves us all to explain and correlate the milder complaints which seemingly are related to intestinal disorders. In the public mind there still lurks a certain sense of immodesty in discussing complaints referable to the bowel, even with a physician. Until this barrier is broken down by systematic education, more or less difficulty in adequate study of intestinal disease will persist. Patients discuss nasal, bronchial and gastric discharge freely, so why not unusual rectal discharge?

The early symptoms of malignant disease of the large intestine often assume bizarre patterns. They may simulate the picture of various other intra-abdominal lesions. For this reason, careful anamnesis is the most important procedure. The

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history, in turn, leads to colonic disease being suspected, or, as in the majority of cases, results in a presumptive diagnosis, with fairly accurate localization of the lesion.

Probably because of the nature of the nerve supply of the large intestine, and by virtue of its lumen, and the large portion of the abdomen which it occupies, pain, when present, rarely is at the site of the lesion, particularly if the pain is associated with new growths of the right half of the large intestine. It should be said that, in considering symptoms of disease of the large intestine, the organ is best divided into a right and a left half. The right half is the portion that is proximal to the middle of the transverse colon and that develops from the midgut, and the left half is distal to the middle of the transverse colon and is developed, with the rectum, from the hindgut. Pain or, more commonly, distress resulting from a lesion in the right half of the large intestine, and this includes the cecum and ileocecal region, usually is referred to the epigastrium. It has been said that epigastric distress is due more commonly to disease of the large intestine than to disease of the stomach. My impressions would tend to substantiate this observation although I have not verified it by any statistical study. The distress is not of the type found in cases of peptic ulcer, but at times it will simulate this. It is rather of the type associated with hyperperistalsis or hypoperistalsis of the gastro-intestinal tract. The distress may be cramp-like, aching, or of the type characteristic of pylorospasm. Rarely is it of a nature suggestive of obstruction. This is due probably to: (1) the liquid nature of the fecal current in this portion of the tract; (2) the lack of tendency of growths of the right side to encircle the bowel, and (3) the likelihood of the growth to go on to perforation, formation of abscess or penetration into surrounding tissues. Mild dyspepsia, simulating chronic appendicitis, is common, particularly if the lesion involves or is near the ileocecal valve.

Because of the size of the lumen of the bowel on the right side, growths often reach huge proportions before they are recognized; so a palpable mass is discovered not uncommonly by the patient. This, then, may afford increased absorbing surface; at least it is readily conceivable that such friable surfaces afford increased absorption. Hence, loss of weight and strength occur frequently, and often as unexplained symptoms, before any other evidence of intestinal disease appears.

Finally, anemia of varying degrees, often profound, commonly is associated with lesions of the right side. It may be the only demonstrable symptom. There may never have been visible loss of blood, and the patient's inability to carry on his work because of unexplained weakness first calls attention to the anemia. There is no exact explanation of this type of anemia, but that it is due to some perverted function of the mucous mem-

brane, with increased absorption of toxins, seems likely. The anemia is often so profound that one is called on to distinguish it from pernicious anemia. Differentiation of the two pictures should not be difficult, but carcinoma of the right side of the colon stands among the most significant lesions to be considered in a differential study of any primary or secondary anemia.

There is another group of malignant tumors of the right side of the colon which, according to present data, do not present symptoms or signs of disease, except as an accidentally discovered mass in the right side of the abdomen.

Alternate constipation and diarrhea often are associated symptoms of disease of the right side of the bowel, including malignant disease in that region. The diarrhea is rarely, if ever, severe. The stools may be loose and watery and contain considerable mucus, but blood seen grossly is exceedingly rare.

Lesions of the left half of the large intestine present a different picture. The colon here is narrower, the fecal material has tended to become formed, and the nature of neoplastic lesions on this side varies often in a very striking manner from those on the right.

A polypoid type of tumor may grow to considerable proportions before producing symptoms, but it is more likely to produce irregularity of the bowel relatively early. There may be symptoms resulting from irritation of the wall, such as loose stools and discomfort, or those associated with trauma to the tumor in the form of streaking of stools with blood. As the tumor increases in size there may be alternate partial obstruction, with abdominal cramping, urgency of bowel movement, or continuous diarrhea. A mass may be palpable fairly early, both because of the size of the tumor as well as the fecal accumulation above the lesion. Adenocarcinoma and the colloid type of carcinoma may present a similar picture, except that bleeding, because of ulceration, obstruction, fixation, and infiltration, may be more marked.

Rectal tenesmus occurs in lesions low in the rectum and in those in which the anal sphincter is involved. It may be noted with lesions in the rectosigmoid, but here, as in inflammatory lesions of the rectum and sigmoid, it suggests infiltration of the wall by the lesion.

Sarcoma and lymphosarcoma have no characteristic signs except that they may begin as perirectal lesions, and the mucosa may remain intact until rather late. Digital examination may give the impression of velvety excrescences narrowing the rectal lumen.

Another type of malignant growth of the left side of the colon may give a different and rather characteristic story. This is the annular, scirrhous type of lesion. It grows outward from the lumen, infiltrating the wall, involving the intestinal muscle with gradual "napkin-ring" contraction, so that often, if not usually, the first symptom is

obstruction. This obstruction is not uncommonly complete in its first attack or there may be recurrent episodes of days of obstruction, finally relieved by enemas or purgation, with periods of weeks or months of complete freedom from trouble of any kind.

The type of peristalsis in obstruction of the small intestine varies rather decisively from that in obstruction of the large intestine. Peristalsis is difficult to perceive in any except lean persons, but when it is seen, the size of the wave and its rapidity of motion are characteristic. In the colon the motility is sluggish and prolonged.

A remarkable feature of obstruction of the colon is the patient's tolerance to it, if it is slowly induced. Annular, obstructive lesions are usually sudden, but other types of malignant lesions gradually may cause obstruction over a period of weeks or months, so that finally complete obstruction may be borne, without apparent injury to a patient, for weeks. I have seen complete obstruction in the left half of the colon which had continued for four weeks without discomfort except progressive abdominal distention.

In the later stages of partial obstruction in the rectosigmoid region or for several inches above and below this point, very marked compensatory diarrhea may occur. In nearly all lesions of the left side of the colon there is some degree of obstruction, and this is the most important single symptom, although often late, of malignant growth of the left portion of the colon.

Next to careful anamnesis, the most important diagnostic aid in diseases of the large intestine is the roentgen rays. The barium enema is the most satisfactory method of gaining visibility in diagnosis of disease of the large intestine. Because of the frequent occurrence of colonic obstruction, the opaque meal, given by mouth, may become a real menace, for the danger of bismuth becoming impacted above the lesion is a real one. Not infrequently this has produced acute intestinal obstruction to be superimposed on a chronic process. Under the fluoroscope, the bowel is filled by barium enema, and the typical deformity known as a filling defect is visualized. The actuality of the defect is verified by a roentgenogram. The deformity produced by various types of malignant lesions varies enough that often the type of lesion is suggested preoperatively.

The examining finger and the proctoscope cannot be overrated in importance in the diagnosis of intestinal disease. The proctoscope, by its direct visualization and the opportunity it affords for biopsy, is an invaluable aid to accurate description of rectal and sigmoidal lesions. When the lesion can be visualized accurately by the sigmoidoscope, roentgenography is contra-indicated, because of the danger of getting barium above the lesion, and thus causing obstruction and because the extra manipulation, with its accompanying discomfort, is not necessary. Biopsy of lesions within sigmoidoscopic reach is of considerable aid, for

by determining the grade of lesion, prognosis is possible and operability in part can be estimated.

In my experience the examining finger is of greatest value in localization of rectal and sigmoidal lesions, and it is of utmost importance to localize these lesions accurately because the surgical approach to the rectum and to the sigmoid vary decidedly. Not infrequently a lesion in a long, redundant sigmoid will telescope into the rectum. This usually can be determined digitally, and rarely by any other means. Any lesion above the reach of the index finger of the average adult is above the peritoneal reflection and hence in the sigmoidal portion of the large intestine. Furthermore, much can be learned of the type of lesion by digital examination; fixation and size can be determined, and frequently operability can be predicted.

When, as far as possible by clinical means, the existence of a malignant lesion of the large intestine has been determined, it is of utmost importance to determine the presence or absence of metastasis. Until intensive study of disease of the large intestine is undertaken more generally, many of these patients will present themselves for diagnosis after the lesion has been disseminated to distant parts. It is my custom to make systematic investigation for metastasis in all cases. A few cases are on record in which the so-called sentinel gland (Virchow's gland), that supposedly appears commonly in cases of carcinoma of the stomach, has been found in the supraclavicular fossa. Clinical and roentgenoscopic examination of the thorax should be made in all cases. Careful palpation of the liver should be carried out and percussion for an extended area of hepatic dulness should be made. If suspicion of hepatic metastasis is entertained, and this probably is the most common site of metastasis from colonic carcinoma, a test of hepatic function may help to settle the question. A high degree of retention of dye is suggestive of hepatic metastasis.

Finally, in anal lesions such as epithelioma, and in low rectal lesions, the lymph nodes of the groin should be palpated carefully.

When all presumptive evidence points to a malignant lesion of the large intestine, there remains the important, careful distinction from other serious intestinal disease. Probably the most significant differential problem arises with single and multiple, so-called benign, polyps. Until more accurate diagnostic criteria can be established, all colonic and rectal polyps must be considered potentially malignant. Polyps may exist as single or as a few disseminated lesions, or in the form of extensive, more or less diffuse, polyposis. The proctoscope and roentgenogram again are invaluable as diagnostic aids here.

The hyperplastic form of intestinal tuberculosis must be distinguished from carcinoma of the colon, particularly on the right side. The usual occurrence of tuberculosis in younger persons, the longer history, the usual absence of anemia, the

general well-being of the patient, and the finding of a pulmonary tuberculous focus are helpful hints, but surgical exploration usually is necessary to establish the diagnosis.

Diverticulitis, in the left portion of the colon, with formation of local abscess and tumefaction, presents diagnostic difficulties. The history of acute onset, and the finding, by roentgenogram, of evidence of other diverticula, together with rather characteristic spasm and the absence of blood in the stool, are diagnostically helpful.

Fecal impaction, particularly in the rectosigmoid region, although uncommon, must be ruled out when an unusual, nodular, tender mass exists.

Inflammatory and traumatic rectal stricture must be distinguished from scirrhus carcinoma.

Perirectal lesions in the form of lymphomas, and occasionally the induration resulting from certain forms of injection for hemorrhoids, occasionally offer diagnostic difficulties.

Amebic dysentery usually can be identified by the finding of *Endamoeba histolytica* in the stool, and chronic ulcerative colitis, by its typical proctoscopic and roentgenologic picture.

Histories of illustrative cases follow:

Case 1: A woman, aged fifty-eight years, came to the clinic in December, 1929, with a diagnosis of carcinoma of the bowel which had been made three weeks previously. For seven or eight years she had felt as though there was something in the rectum, but for only five weeks prior to admission had blood been mixed with the stool. There was no loss of weight. Digital examination of the rectum revealed an indurated, ulcerated region about three centimeters in diameter on the posterior wall of the rectum just above the anus. The proctoscope showed this to be carcinoma. It was resected by a Harrison-Cripps type of operation January 2, 1930, and proved to be epithelioma.

Case 2: A man, aged sixty-two years, came to the clinic June 9, 1930, with a history of rectal bleeding of one year's duration. There had been gradual loss of weight for six months, occasional rectal pain for a day or so at a time for the last four or five months, and frequent desire to defecate for two or three months. On admission he was having four or five stools each day, streaked with blood, and he stated he had lost nineteen pounds in the two months prior to his arrival at the clinic. Digital examination revealed a polypoid lesion fixed posteriorly and projecting into the rectal lumen. The proctoscope revealed a polypoid mass about six centimeters in diameter on the left side of the rectosigmoid portion of the bowel, thirteen centimeters above the anus. It was removed by anterior resection and proved to be adenocarcinoma, graded 1.

Case 3: A woman, aged seventy years, came to the clinic August 13, 1928, complaining of intermittent twinges of pain in the abdomen, which had no relation to meals and had occurred not earlier than six weeks before admission. They

had become steadily more frequent and finally eating had seemed to bring them on. In the last month there had been increasing constipation. A week before admission she had had severe abdominal cramps for relief of which morphine had been required. There was slight loss of weight and strength. The patient was very sick and the abdomen was somewhat distended. There was active peristalsis and diffuse tenderness in the right side of the abdomen. A mass was felt in the right lower quadrant of the abdomen. Ileocolostomy and, later, resection of the right colon was performed for lymphosarcoma.

Case 4: A woman, aged fifty-two years, came to the clinic July 29, 1930, with a history of having had rectal trouble for fifteen years. In 1917 a rectal polyp had been removed. During the last year there had been rectal bleeding, with two or three stools each day, and more recently bright red blood had been passed between stools. Digital examination of the rectum revealed a hard, fixed, irregular mass in the posterior wall of the lower third of the rectum. The proctoscope made it possible to see several small polyps in the rectum and rectosigmoid and a firm, sharply defined lesion involving the posterior wall of the lowest third of the rectum. Colostomy August 2nd, and posterior resection August 20th, were done for a scirrhus adenocarcinoma, graded 2, without lymphatic involvement.

Case 5: A physician, aged fifty-seven years, came to the clinic July 10, 1930. He had had a growth in the rectum for five months. He had had a polyp removed from the rectum in 1897. There had been occasional attacks of abdominal distress in the last year but rectal bleeding only for five months. In the last week he had averaged eight to ten stools a day. He had lost fifteen pounds in the two weeks prior to admission. Digital examination revealed a mass in the rectosigmoid region and proctoscopic examination showed this to be a movable, obstructive carcinoma. Colostomy was performed July 16 and posterior resection August 5th for an annular, perforating adenocolloidcarcinoma, graded 2, without lymphatic involvement.

Case 6: A man, aged sixty-nine years, came to the clinic May 31, 1927, complaining of stomach and intestinal trouble of three months' duration. He had been seized by an attack of severe epigastric pain, with nausea and vomiting, two months before admission, and since then diarrhea, with the passage of three or four stools a day, had been noted. He complained of sour stomach. There was a constant heavy feeling in the epigastrium. He had lost thirty pounds in weight in the two months. He was emaciated and abdominal peristalsis was visible. Double resection was performed for two carcinoid tumors of the ileum, each graded 2.

Summary: Malignant lesions of the colon and rectum occur as epithelioma, adenocarcinoma, colloid carcinoma, polypoid carcinoma, scirrhus

annular carcinoma, and lymphosarcoma. Whether the growth is situated in the right or the left half of the large intestine forms the basis of the type of history obtained. Change in intestinal habit, epigastric distress, localized pain or tenderness, tumefaction, profound anemia, obstruction, and bleeding form the principal important symptoms of malignant disease of the large intestine. Roentgenologic and proctoscopic data, together with accurate palpation of the abdomen and digital examination of the rectum, give the most important objective revelations.

SOME EYE CONDITIONS IN CHILDREN OF INTEREST TO THE GENERAL PRACTITIONER*

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No attempt will be made in this discussion to cover all the diseases of childhood that may have ocular manifestations. Only those of more frequent occurrence or of unusual interest will be considered. They may be enumerated as follows: Co-ordination of the eye in the new-born, squint, lachrymal obstruction, drooping of the eyelids, phlyctenular conjunctivitis, ophthalmia neonatorum, cataracts, brain tumors, multiple sclerosis and headaches.

Strabismus: If the eyes of a new-born babe are observed carefully it will be noted that for the first two or three weeks the eyes waver about without any effort of fixation. When the baby is about three weeks old it may fix with one eye while the other wanders about aimlessly, leading at one time to a convergence and at another a divergence. If the eyes are healthy and there is no marked refractive error, at about the age of six weeks the eyes will track and the child will look about, fixing with both eyes, a function that will continue throughout life if no abnormalities develop later.

If there is present a marked refractive error, especially a high degree of farsightedness, or if for any reason the child does not see equally well with the two eyes, a squint may develop. The age at which a strabismus is first apparent in the majority of cases is about two. Any intercurrent accident or disease coming at this time is thought frequently to be the cause of the strabismus. As a matter of fact, when a child is about two he first begins to look intently at near objects, and, if farsighted, to exert his accommodative power excessively with resultant over-convergence. The effort involved in this process is usually the cause of squint and an accident or any intercurrent disease has no bearing on it.

The management of the strabismus can begin at this time. The use of the squinting eye can be encouraged by covering the other eye with a patch for two or three hours a day, or if the child will not tolerate this procedure, atropin can be

instilled in the better eye, thus enforcing the constant use of the eye that is inclined to squint until such time as glasses can be worn. When the child is about two and one-half years of age a test for glasses can be made and if there is a marked refractive error (and most of these cases will be found to be very farsighted), glasses should be prescribed to be worn constantly. The advice so frequently given—to do nothing because the child will outgrow the strabismus—is faulty in about eighty-five percent of the cases. It is quite true that a small number of these patients will outgrow enough of their farsightedness to enable them to hold the visual lines parallel when the strabismus will disappear, but, in general, to neglect correction of their refractive error will lead to a permanent squint.

The habit of using one or two eyes must be developed in the majority of cases by the time the patient is six or seven years old. If the strabismus persists beyond this age, an operation almost invariably is required. On the other hand, if cases that would be relieved by glasses are operated upon early, they may later develop a divergent squint. Unfortunately, it is impossible to select the cases that may develop binocular sense from those in which the strabismus will persist. I am of the opinion, therefore, that an early operation in cases of squint is not advisable.

An embarrassing situation at the moment is the arbitrary dictum in certain quarters that taboos the use of glasses entirely, whether it be for strabismus in the young or lack of power of accommodation in the old. For one to imagine a civilized community functioning perfectly without spectacles is contrary to history dating back to medieval times. It is so much easier to give the patient or parents the advice they want, rather than the advice they ought to have, that there always will be those who will be tempted to follow the path of least resistance.

An effort has been made to explain the origin of squint in physiological terms and it is claimed that whatever may be the influence of a refractive error, some other factors must be considered in determining the cause of backward binocular function. A relationship between squint, left-handedness and stammering has been suspected, but is not yet proved. Psycho-analysts are of the opinion that the "emotional difficulties of the child in meeting social demands have an importance which until now has been hidden save from those who have made a special study of this subject."

Each one of us is right or left-eyed just as we are right or left-handed. With few exceptions in sighting objects we prefer to use one or the other eye. If you desire to know whether or not you are right or left-eyed, a very simple test will reveal it. It is made as follows:

With both eyes open, hold up one finger at arm's length between your eyes and an electric light, so that the light is exactly in line with your finger with both eyes open;

*Read before the Indiana State Medical Association at Fort Wayne, September 24, 1930.

then close first one eye and then the other, looking at the light with each eye. You will find that with one eye the light remains in line with your finger, while with the other eye the light is at one side or the other of your finger. If your right eye sees the light in line with your finger, you are right-eyed. If the left eye sees it, you are left-eyed.

In the same way we are right or left-eared. Each of us has a preferred ear in the use of the telephone. Certain combinations of the centers in the brain, determining whether or not our various senses are right or left, may contribute to the possibility of great dexterity in certain individuals, as in musicians and billiard players. A faulty arrangement of these centers also may account for the game of golf some of us play in spite of all our practice.

Lachrymal Obstructions: Occasionally one sees in the new-born baby an obstruction of one or both lachrymal ducts. Usually it is one-sided. These cases present a watery eye from the time of birth and the condition is not only a great annoyance to the patients and parents, but a positive source of danger, in that the eye is subjected constantly to infection. This obstruction of the lachrymal apparatus in the new-born is due to the accumulation of epithelial debris or the persistence of a membrane at the lower end of the duct that normally disappears at the time of birth. Treatment consists first in an effort to force tears through the duct by pressing several times a day at the junction of the nose and the eyelid on the affected side. Drainage may be facilitated somewhat by the use of a mild astringent—one-half grain solution of sulphate of zinc to the ounce, to which a few drops of adrenalin have been added. A drop of this lotion can be put in the eye in the hope that it will work into the duct, contract the capillaries, and make the passage more patulous. If this simple procedure fails, it is necessary to pass a probe through the lachrymal duct. Usually a single operation is all that is necessary and the condition will clear up as by magic.

Ptosis: One of the most unfortunate conditions that may result from a birth accident or from the absence of the muscle that elevates the lid is a drooping of the lids, technically known as ptosis. As a general rule, congenital cases are bilateral and there is an absence or loss of power of the levator muscle. On the other hand, the acquired cases usually are one-sided and are a result of a lesion of the nerve. Management of this unfortunate condition is unsatisfactory except from a surgical standpoint. I have never seen a case improved by the use of massage or electricity, although I have seen both tried over a long period of time. As the condition usually is due to the absence of a muscle, surgical procedures are directed to substitute for this loss the action of another muscle. The most successful operation in the minds of many is to connect the tissue of the lid through scar tissue to the occipital frontalis

muscle so that the patient opens his eye by wrinkling his brow, a function that can be acquired easily after the connection has been established. The age at which this operation may be performed varies somewhat according to different surgeons, but it is not performed usually until after the age of three.

The results from this operation are never perfect from a cosmetic standpoint, but from a practical one are good, as the lids may be elevated sufficiently to prevent interference with vision.

Phlyctenular Conjunctivitis: Phlyctenular conjunctivitis is essentially a disease of childhood and manifests itself in one or more small lymphoid accumulations somewhat umbilicated and surrounded by a spider-like vascular base. Individual attacks usually are easy to control and one of the best remedies is calomel to be dusted into the eyes once daily. It is not, however, its local manifestation that leads me to speak of phlyctenular conjunctivitis at this time. I think it is now agreed quite generally that this disease is seen most often in those who are predisposed to tuberculosis. It appears in patients who formerly were said to have a strumus diatheses. I am perfectly well aware that this expression is somewhat out of fashion, but it still tells more about this group than could be conveyed in any other way. These patients should be treated as potentially tuberculous.

Ophthalmia Neonatorum: The education of the public through societies for conservation of vision and the national eye societies has been so effective that ophthalmia neonatorum rapidly is disappearing. It has been a great piece of educational work, and the results have been inestimable. Fifteen or twenty years ago an address of this kind would have been devoted in large part to the presentation of the ravages of this disease, together with its management. Now it requires but a word in passing.

Cataracts: Cataracts may appear as a partial or complete opacity of the lens. The eye may be otherwise healthy or it may be there are inflammatory changes in the fundus which would influence the visual acuity even though a successful operation for cataract were performed. The etiology of congenital cataracts is not known. There is supposed to be some disturbance of nutrition during intra-uterine life or an arrest of development. Consanguinity and heredity may have some influence on development of cataract, and we occasionally see a group running through a family. The majority of cases, however, are isolated and history of heredity is not obtained.

Glioma: Occasionally a child will be seen with a history in which the parents noticed that the pupillary space in one eye gave a distinct white reflex when the eye was in certain positions. There are two pathological conditions that may lead to this condition. The one is malignant tumor of the retina or choroid, and the other is the result of an organized exudate in the vitreous following

an inflammation of the choroid or ciliary body. Differential diagnosis between the two is not always easy, but the condition is so serious in any event that a reflex of this kind should lead always to a thorough investigation of the eyes. It frequently occurs without the eye showing any redness or other diseased condition. The presence of a malignant tumor means immediate enucleation, while inflammatory exudate may lead to blindness, but not necessarily to the loss of the eye.

Multiple Sclerosis: In children, as in adults, a nystagmus on lateral motion, sluggish pupils, fleeting attacks of transitory blindness, ocular palsies, narrowing of the fields and diminution of vision all suggest the possibility of multiple sclerosis. The ocular symptoms may antedate by weeks or months the intention tremor, the scanning speech, the weakness of the extremities, associated with increase of the deep reflexes. The most constant ocular symptoms of multiple sclerosis perhaps are the pallor of the temporal side of the disc and multiple scotomata (small blind spots scattered about the fields of vision). Occasionally a choked disc is present, but complete blindness rarely occurs.

Brain Tumor: Brain tumors in children are not uncommon. Every case of vomiting, vertigo and persistent headache should have an examination of the fundus to determine the presence or absence of choked disc. Headaches and vomiting when associated with choked disc point very strongly to the presence of intracranial tumor, if nephritis, severe anæmia and lead poisoning can be eliminated. Choked disc in cases of brain tumor indicates increased intracranial pressure. In children whose fontanelles are not closed completely the tumor may attain a considerable size without causing intense headaches or marked choked disc.

Headaches: While headaches in children frequently are cured by the use of properly adjusted glasses, there is a type of headache seen in the adolescent that is not so relieved. It occurs in fat, hairy girls, usually at the age of adolescence, in whom the menstrual function is delayed or imperfect. These headaches may be due to a physiologically enlarged pituitary body, incident to adolescence, contained in the sella that is congenitally smaller than the average. The condition may be similar physiologically to that of goitre so often seen at this age. These cases may belong to the group that has visual disturbances and headaches at three other important crises in the life of a woman, namely: menstruation, pregnancy and menopause. I have had occasion to observe a few of these young girls referred because of headaches who were not relieved by glasses or ordinary remedies. Great benefit followed the administration of extract of the pituitary gland. While perhaps eighty percent of the cases of functional headaches can be relieved by the use of glasses, it does not follow that eighty percent of all cases of headache are functional in origin. Only a careful study, after a complete examina-

tion, will reveal the cause in many cases, while the etiology in a few will remain unsolved.

SURGERY—AN ANESTHETIST'S VIEWPOINT*

FLOYD T. ROMBERGER, M. D.

LAFAYETTE

Surgical anesthesia and surgical judgment are the pillars which, with a keystone of surgical asepsis, form the arch of the gateway through which must pass our surgical patients—for better or for worse. It can be accepted as axiomatic that, while the execution of the individual details of this controlling triumvirate remain separate and distinct, yet, at the same time, unquestionably, there exists between them an interdependence of far-reaching significance to the welfare of our patients. First, without surgical anesthesia of some kind, be it either regional, local, spinal, topical, inhalation, rectal, or intravenous, surgical operations could not be performed, and it is largely because anesthesia has been steadily keeping an active pace that surgery has been able to continue its triumphant progress toward success. Secondly, without surgical asepsis the incidence of post-operative infections would be so high that surgery would occupy indeed a very limited field. Finally, without surgical judgment, our post-operative mortality and morbidity would reach such astonishing figures that we could not blame our patients for refusing to accept the needed remedial surgical measures.

In any surgical clinic or center where there is available for administration to the patient but one anesthetic agent, say ether, then every surgical condition and procedure must conform to that type of surgical narcosis; and, while there is no disposition to decry the wonderful benefits which have accrued to humanity through the discovery and wide-spread use of this type of anesthesia, still the alert and ever-progressive surgeon achieves for his patients an immense advantage where more than one agent or method of anesthesia may be had. Should ether and gas-oxygen only be available, the choice must reside between those two. So one may run the gauntlet of the entire field of surgical anesthesia, and it is only in those clinics or centers where the widest selection of anesthetic agents are utilized, presumably given with experience and judgment, that one finds the highest degree of selectivity and adaptability of the anesthetic agent, both to the surgical condition of the patient and to the surgical procedure which any one particular surgeon may wish to carry out. It is believed that this is a distinct advantage and leads to enhanced post-operative comfort and convenience to our patients, and to a consequent lessened mortality and morbidity. The world moves, and we must move with it or be left behind. In any field of endeavor, he whose brain cells are so atrophied or inert as to allow

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him to pose obstructingly upon the right-of-way of the on-rushing train of progress is likely to find himself among the wreckage and debris by the wayside. As the wheel continues to follow the sunken track, the rut becomes deeper and deeper until, finally, the passage of the cart is totally impeded. The essence of life is growth; the antithesis of growth is decay; the primary symptom of mental decay is stagnation.

It is a fallacy to presume that smart, alert, and intelligent as surgeons usually are, they can be as proficient in the field of anesthesia as they are in their own particular specialty. They cannot bring to their patients the invaluable safeguards possessed by the experienced anesthetist. Yet, in some centers, surgeons can be found who not only dictate the method and kind of anesthesia, but also attempt to supervise its administration. Again, it is not unusual for surgeons, those unacquainted with the rather definite limitations of each different anesthetic agent, to ask, or even demand, more from the resultant anesthesia than any anesthetist, no matter how experienced, can give.

Surgical judgment proper is rather hard to define; but, when reduced to its elemental factors, when analyzed in its fundamentals, one must be forced to say that surgical judgment consists mainly of two basic parts, knowledge plus experience. Knowledge alone, without the practical application of that knowledge in a long and varied clinical experience, certainly is lacking; experience alone, without the pre-requisite knowledge, and the continued acquisition of knowledge by study of and interest in the surgical problem at hand, also leaves something wanting. It is only by the synthesis of these two fundamentals in one cerebral cortex, and from thence transmitted to one pair of mechanically accurate hands—it is only by this combination of knowledge plus experience, as a formulator of surgical judgment, that we can hold out for our patients the optimum chances for their welfare. It is pitiable indeed to observe a surgeon boldly and ruthlessly enter the innermost secret recesses of the abdominal cavity without an adequate knowledge of what he there may discover, and, when he does find pathology, then be without sufficient experience to know what to do with it. Under these circumstances, there is bound to be an attendant rise in surgical mortality.

Now, lest the auditors gain the impression that post-operative mortality and morbidity is confined to but one locality in Indiana, opportunity is taken to quote verbatim from a thesis published August, 1930, in the Indiana State Medical Journal, by Emhardt. "Died in 24 hours, apparently with general exhaustion." "Following stormy course, died after three days." "Died after twenty hours." "Died while receiving anesthetic." It is only by the closest study, the deepest interest, and the most cordial cooperation between surgeon and anesthetist that such catastrophes may be avoided or, at least, reduced below

our present minimum ratios. It might be questioned whether sometimes we do not become overbold in subjecting our patients to the more complicated and more risky remedial procedures, when something more simple would be less hazardous to life.

Surgical judgment must begin with the preliminary examination of the patient and with the proper psychological approach, thus bringing our patients to the hospital with the most favorable mental attitude toward their surgery. Adequate and thorough preliminary pre-operative care will carry the patient to the operating room with the best possible chance and in the most advantageous physical condition. Unquestionably, many surgical problems present optimum days, days of election, when the necessary remedial procedure may be carried out; and recognition of this fact, along with the selection of such favorable period, has a very beneficent influence on the subsequent post-operative mortality and morbidity. The greater the care we exercise in putting our patients in good pre-operative physical condition and a proper frame of mind, the greater will be the improvement and the better will be the chances of our success. Patients should not be hurried or rushed into their surgery. There always is time to do the essential necessities before operating. The time long since has passed when surgeons boasted "ten minutes more and it would have been too late; the appendix would have ruptured." This preliminary pre-operative care entails such features as rest and the combatting of trauma, shock, and toxemia, the replenishment of body fluids, the bolstering of failing cardio-vascular systems, preliminary narcosis where indicated, and anything further which tends to bring that patient to the operating room in the best physical and psychic condition to withstand the surgical assault.

Operatively, the greatest discrimination must be exercised in the selection and administration of the proper anesthetic agent. Team work between the surgeon and anesthetist is absolutely essential, as also is the cooperation of the surgical assistant and surgical nurses. Everything must be eliminated which tends to foster delay in the surgical procedure and thus prolong the time that the patient is forced to withstand inescapable surgical trauma. We must stop kidding ourselves into believing that because our patients are under the influence of the anesthetic, whatever the agent may be, they are not being hurt. This is not meant to infer that undue haste should be carried out at the expense of doing good surgery, but it is an unquestioned fact that many valuable minutes are lost by lack of organization and attention to detail. Operating room demeanor should receive consideration. There should be no occasion for the following remark: "Well, having solved all the problems of city and state, and indeed of the national government, don't you think we might as well close this lady's abdomen?"

Post-operatively, equally as attentive should be the care given our patients as in their pre-operative or operative technique; it decidedly is not good surgical judgment to trust the post-operative care of desperate cases to the unsupervised care of the interns, however well trained or qualified they may be. Among the pertinent factors post-operatively are: morphine, replacement of body fluids by hypodermoclysis, and rest. Among these, the greatest is rest, prolonged rest. Post-operative morphine to control the patient's pain goes without saying; hypodermoclysis instead of proctoclysis is accepted as more accurate and more scientific by leading surgeons of the day; while rest, prolonged rest, is a factor sometimes overlooked. It should be asked, in our foolish sense of pride in getting our patients well too soon, in our speed-mad craze of having them out of the hospital in the shortest period of time, are we doing full justice to many of our surgical patients? Are there not perhaps certain sequelæ not always apparent the first few days or the first two weeks which, later, add to our records of post-operative mortality and morbidity?

Concerning surgical mortality and morbidity, there must be no so-called irreducible minimum standard. While the mortality rate of pioneer surgeons ran from ten to forty percent, the ideal we constantly must hold before us is such improvement in surgical procedure, that, ultimately, there will be no mortality; otherwise the therapeutic effort becomes a greater menace to the patient than the disease. Laudable pus, hospital gangrene, healing by second intention, crudities of hemorrhage control, and maladministration of anesthetic agents,—all these foes have been met and conquered. Would we still further scale the heights of success, we must devote our attention to improvements in pre-operative care, selection of optimum surgical period, operative technique, and post-operative convalescence. Toward that end, standardization of surgical procedures with only cautiously adapted variations to suit the individual pathological problem most certainly will lead to lowered mortality. The antiquated means of yesteryear must give way to the more modern and more scientific methods of today. Surgeon and anesthetist, in cooperation, must learn to finesse each case at will and as required; they must exercise equal skill and judgment. There is no real reason why the patient should be more apprehensive of the anesthetist's mask or needle than of the aseptic scalpel in the hand of the tyro; each may do equal damage; each may maim or kill. In this connection, it often has been observed that when a physician or surgeon is about to have a surgical operation, on himself, he is as choicely about the selection of the anesthetist and the anesthetic agent as he is about the surgeon. Why?

It is quite true, that the few principles herein enumerated are simple fundamentals which often have been preached by more eminent authority

than the writer; yet, sad to relate, oftentimes they are neglected. It is only by the strictest attention to the minutiae of details that we may expect success.

Projecting oneself into the future, ten, fifteen or even twenty years, it readily can be seen that advance toward the reduction of surgical mortality and morbidity records in our state of Indiana can be obtained in two ways. First, our State University should organize a separate and distinct department of anesthesia, headed by a teacher or director of experience, judgment, and courage, and backed by a real live scientific research department where all the different exemplifications of the anesthetic art, and their proper correlation with the surgery proposed, may be worked out and applied. To such a department could be referred all the old and the new problems of anesthesia, and from it would come, for the benefit of all physicians and surgeons throughout the state, the most trustworthy and unbiased information and judgment. Such a department would develop the anesthetists of tomorrow, both as strictly hospital anesthetists and as distinct specialists in the field. They would be proficient with all agents and in all methods. They would be able to select and adapt to each particular patient the surgical anesthesia best calculated to solve the surgical requirements and get the patient well. And this, no less, should be our aim.

Secondly, the time has arrived when the doctor with little or no surgical experience must not be allowed to open the abdomen with impunity, and there must be a minimum standard of fitness for those who would attempt to do major surgery. For example, it is utterly impossible to determine in advance what condition may be met during the operation for right iliac pain and pathology; and, hence, it is not unjust or unreasonable to demand that those who would surgically explore the abdomen, be competent to handle any condition which there may be encountered. We owe it to our patients, and the time is here, when this association must sponsor its membership, each in his individual field, and when this association must guarantee to the laity that incompetence in any branch of medicine or surgery, in any particular method or procedure, justly will receive the righteous condemnation of, and thumbs down from, the entire medical fraternity. This can be accomplished in but one way: knowledge plus experience, formulating judgment. The knowledge must be obtained by intensive post-graduate study following the four years of medical study and the one year of strictly rotating internship. The experience must be acquired by association with, or assistantship to, an active practitioner who has these fundamentals of judgment. Only then and by this method, can we raise in this our great and proud state a generation of younger surgeons and anesthetists to take the place of those of us who ultimately must pass on.

The problem of supplying the future generations with competent anesthetists and surgeons would receive a real boost if our state laws of licensure were amended, so that those who would essay major surgery, and those who would administer anesthesia for such surgery, would be allowed to do so only after proper certification from such board, which would grant this permission only to those who had proper training and experience, to those who showed evidence of real surgical judgment.

DISCUSSION

MARIE KAST, M. D. (Indianapolis): I think the Surgical Section is to be commended for considering this topic of anesthesia.

If anesthesia were blotted out entirely today, the entire structure of modern surgery, much of medical practice, and a great deal of very important laboratory research would go crashing into the abyss of oblivion. Having attained such a conspicuous place in relation to surgery and having attracted the attention and cooperation of other allied scientists including chemists, pharmacologists, physiologists, biologists and pathologists, the professional anesthetist of today commands and deserves recognition. This particular branch of medicine should rank high with surgery and internal medicine, from which now it is impossible to separate it. This state of affairs has meant much for the safety and comfort of the patient and the rapid development of surgery.

Dr. Romberger refers in a way to specialism. In defense of such a reference as he applies it, may I say—nearly all the progress of any science to date is due to the efforts of individuals who have taken up a particular kind of work or profession and have given much or all of their time and energy toward the thorough development and perfection of it. As a result we hear and use the term "specialist." Suffice it to say, the student in his field who has given such careful attention to his training, together with experience and good judgment, is the one who should set the standard of the real specialist. There is just resentment on the part of any sane thinking person against the promiscuous application of this term. While there seems to be a limiting feature to this practice, after all only the fittest really keep the standard elevated. Therefore, only those properly qualified and trained deserve recognition in the profession and positions of importance where the responsibility of the training of others similarly interested is entrusted to them. This is not so limiting that others may not follow in the same field of endeavor to the limit of their ability and training. This is true of surgery, medicine or any other field.

The progress of anesthesia has been difficult and oftentimes has met with considerable opposition, but it can be conscientiously said that its progress has not been by clinical experience alone. It has builded slowly and securely on a foundation of experimental research as well.

It seems as if I may have reversed the topic assigned to me in this brief discussion, but it is easily reversible for what I could say of one would hold for the other. Each is essentially dependent on the other—each owes its success and development to the other. The responsibility of each is equally important.

If a specialty can attract and create enough interest for those of allied sciences who have cooperated unceasingly and eagerly in research work, it seems logical that the highest consideration should be given it by the profession. All of those interested then should be willing to conform to such regulations which would not only elevate the individual standard but the general standard and recognition as well. We should all be in accord with such proposals as set forth by Dr. Romberger to keep the standard of those engaged in the practice of surgery and anesthesia throughout our state at as high a level as possible.

ERYTHROEDEMA POLYNEURITIS A Review of the Disease and a Report of Two Cases.

FRANK W. MESSER, M.D. AND H. O. WILLIAMS, M.D.

KENDALLVILLE

Erythroedema polyneuritis, more commonly known as acrodynia, is a disease of infancy and early childhood of sufficient rarity as to prove of great interest to the general practitioner and often a stumbling block, necessitating the calling in of a pediatrician. Few diseases impress one so as to the utter hopelessness of the case; yet few offer so bright a prognosis as to the ultimate outcome. Much can be done to hasten recovery with modern therapeutics.

This malady is characterized by erythema and oedema of the extremities, a maculo-papular body rash, and sundry motor, sensory and psychical disturbances.¹

The name "Erythroedema Polyneuritis", because of its resemblance to beriberi, was first proposed by Paterson and Thursfield as expressing the most striking clinical and pathological features of the disease.²

The occurrence is more frequent among males than females. Those between six months and four years are more commonly affected. It is no respecter of class or person. It is as common among the well to do as among those of a poorer environment. It occurs in all countries and climates. It affects the breast fed child as well as the artificially fed. It frequently follows infection of the respiratory and gastro-intestinal tracts. As a result, the removal of all possible foci of infection from the throat has been resorted to early in the disease in an effort to shorten its course. The results have been discouraging. It has of late been considered a vitamin D deficiency disease. Since the publication of an article by Dr. S. J. McClendon³ in the August 10th, 1929, edition of the *Journal of the American Medical*

Association of the efficacy of "Yeast and Irradiated Ergosterol in the treatment of Acrodynia", together with the progress of two of our own cases under such treatment, we have adopted the same theory and shall hold to it until such theory is disproved and a better presented. For the purpose of propagating further interest in this matter, the present paper has been prepared.

There is usually a history of the child having suffered with a "cold" or an influenzal infection. This may or may not have been accompanied by vomiting or diarrhoea. Usually such an attack is followed by a latent period of several weeks during which a more or less complete recovery seems to have been made or, on the other hand, the one seems to fade into the other.

The child appears to be perfectly miserable. He loses interest in his playthings and in his surroundings. His expression is blank or resentful of disturbance. He may or may not suffer from photophobia. If he does, he avoids the light. He hides his face in his pillow or cries when taken into the sunlight. In bed, he often lies with the trunk bent forward and the thighs drawn up. He is extremely restless. Covers can not be kept in place. He is all over the bed. He sleeps fitfully in the day time and for short periods only at night. The parents are distracted and in an effort to soothe him, resort to pacing the floor and rocking him, literally the whole night through. Older children complain of burning, stinging pains in the hands and feet and of a body itching. They scratch themselves almost constantly.

The hands and feet are slightly swollen and of a bright red. This redness fades from the middle of the hands and feet proximally. Paterson draws a true picture when he states, "Nothing so characteristically describes this condition as does 'raw beef' ". When felt, they are cold and moist. The puffiness does not pit. The trunk is covered with macules and maculo-papules. There is a profuse generalized perspiration at all times. The cheeks are flushed and the nose is red. The patient has the appearance of a regular little "topper". Mouth breathing is frequently observed. The hair is dry, lusterless, and often comes out in patches. The nails may loosen and drop off. The tongue and gums are frequently ulcerated. The teeth often loosen and drop out. The muscles of the neck, back, and extremities become weak and flabby. The muscles of the arms and legs lose their tone and become soft. The child, if able to walk, stand or crawl, can no longer do so. Neither can he support himself in a sitting posture. The head falls forward or to one side. The tendon reflexes and cutaneous reflexes are either greatly diminished or absent.

The appetite is poor. The bowels are usually constipated with occasional periods of diarrhoea.

The chest is usually normal.

The heart appears normal except for a tachycardia of 140 to 180 beats per minute.

The temperature is normal unless there is a persistent bronchitis or other accompanying infection.

The urine is normal or occasionally shows a transient albuminuria or glycosuria.

The hæmoglobin percentage and erythrocyte count is within the normal limits. There is usually a leucocytosis of 15,000 to 40,000 cells.

The prognosis is good. Complete recovery occurs in from four to eight months.

The treatment recommended is largely symptomatic with attention to a varied diet and the administration of calcium, iron, strychnine, arsenic, cod liver oil, and more recently irradiated ergosterol and yeast.

The following case reports are presented for consideration:

Case No. 1. F. B. a white male, age two, had been delivered at term by Caesarian section because of a placenta praevia. After a few days, due to lack of breast milk, he had been placed on a mixture of whole cow's milk, water, and dextrin-maltose. He gained normally in weight but due to an obstinate constipation, his diet was changed by his physician at the end of five weeks to S. M. A. This was continued for seven months or until November, 1928, when it was deemed advisable to again offer him the advantages of raw milk. This was continued until the child became ill in March, 1929, with the disease under discussion.

His first tooth appeared at the age of six months. By the end of his first year there were eight. The anterior fontanelle was closed. There were no evidences of rickets, malnutrition, or improper feeding. The tissue turgor was good. The reflexes were normal. At nine months he crawled and at ten supported himself on his feet by holding on to some object.

During these months, this child had all the advantages of intelligent parents, sanitary environment, and hygienic care. He received daily airings and sunshine. Cod liver oil was administered in his diet.

On Christmas Day, 1928, a physician was called to see him because of fever, a running nose, and a slight cough. He found a temperature of 103 and a moderate bronchitis. There was a slight diarrhoea. A diagnosis of "influenza" was made. A fairly high temperature persisted for two weeks and then gradually returned to normal while the general condition improved. By the middle of January, 1929, complete recovery seemed to have been made. However, it was noticed that there was a loss in weight of eight ounces and a fickle appetite. This condition continued until March 1st, when his parents again called their physician because of redness of the fingers and toes, "a breaking out" on the front and back of the thorax and abdomen and extreme restlessness.

The distal three-fourths of the hands and feet looked as if they had been dipped in boiling water. The skin over the chest and abdomen, over

the back and over the arms and legs was spotted with macules and macule-papules of varying sizes, from those so small as to be scarcely perceptible to those of half a centimeter in diameter.

The condition of the fingers and toes varied but little until improvement began six months later. The body rash underwent periods of fluctuation. The fingers and toes frequently developed large vesicles around the nail edges. The skin over these areas desquamated and left raw and bleeding surfaces. There was intense itching evidenced by persistent scratching.

The temperature fluctuated between normal and 99. Perspiration was profuse and necessitated a frequent changing of the clothing and bedding.

In a week's time, the loss of use of the voluntary muscles became pronounced. He could no longer stand, crawl, sit, or support his head.

He took but short day time naps. Usually, he fell asleep at ten in the evening only to awaken at 12:30 or 1 a. m. and remain awake the rest of the night. This period was spent in crying unless rocked or walked by his parents.

His treatment was largely symptomatic. He was made as comfortable as possible and it was then urged that he be let alone when his actual needs had been administered to. He refused all articles of food except S. M. A. This was taken sparingly every four hours. Orange juice and cod liver oil were administered with strategy. Constipation was controlled with milk of magnesia. Occasional attacks of diarrhoea and colic were treated with salol and bismuth to which had been added a few drops of the camphorated tincture of opium. Some of the restlessness was controlled and sleep secured by small doses of the bromides. The skin was cleansed with mineral oil since it was observed that water aggravated the eruption. Mittens were worn on the hands to prevent scratching and raw surfaces protected by sterile bandaging. Iron, quinine, strychnine, arsenic, calcium, parathyroid extract, alkali, and cod liver oil were all given a fair trial. Graduated doses of sunshine were recommended and persisted in.

The general condition continued with no sign of real improvement until Dr. McClendon's article appeared in the *Journal of the American Medical Association*, August 10, 1929. The patient was then placed on a four hour feeding schedule and a daily diet consisting of one pint of skimmed raw cows' milk, with the addition of the yolks of three eggs, one ounce of finely ground lean beef, various vegetables, one tomato and one orange. In addition, two drops of irradiated ergosterol and a quarter cake of yeast were administered with the first, second, and third feedings. Heliotherapy was continued.

Improvement was remarkable. The body rash, perspiration and vesiculation of the fingers and toes disappeared in one week. The appetite improved. Restlessness ceased in ten days. The child seemed comfortable and was able to sleep

the entire night through. Incidentally, the parents were able to sleep also. The erythema of the extremities disappeared and voluntary muscle control returned so that by the end of three weeks the skin appeared normal, he could support his head and swing the legs. At the end of another seven days he could sit up and began to show an interest in his toys. In six weeks he crawled. At the present time he has the appearance of any normal child. He has learned to walk and has recently cut his twentieth tooth.

Case No. 2. J. D., a white male, age three, was seen for the first time August 18, 1929. There was a history of a "head cold" early in July. Two weeks later, after an apparent recovery, he developed a profuse perspiration, an erythema of the feet and hands, and a diffuse maculo-papular body rash. The voluntary muscles were flabby. The reflexes were sluggish. The child could no longer walk, or stand but was still able to maintain a sitting posture and support the head.

The temperature and urine were normal.

The blood count revealed a leucocytosis of 18,000. There were 60 small mononuclear, 35 polymorphonuclear, 3 transitional and 2 eosinophilic leucocytes.

The same treatment was inaugurated as in the previous case with the exception that the quantity of vegetables and meat was doubled.

The patient was again seen in our office four weeks later. All cutaneous manifestations had disappeared. He was able to crawl, to stand alone, and could walk with support. Restlessness had ceased.

Unfortunately we have lost trace of this case and can only assume that his recovery has been satisfactory or he would have returned for further care.

Conclusions:

1. Erythroedema polyneuritis is so marked in its clinical manifestations that it should be easily diagnosed by the general practitioner.

2. It appears to be due to or closely related to a deficiency in vitamin D.

3. Clinical experience seems to prove that irradiated ergosterol with yeast is a valuable therapeutic agent in hastening recovery.

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EPIDEMIOLOGY OF DIPHTHERIA*

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OF HEALTH
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The epidemiological study of diphtheria in the strict sense is the study of the manner in which one case of the disease is connected with other cases. This study is based upon statistical aspects

*This is the seventh of a series of articles sponsored by the Diphtheria Prevention Committee.

of epidemics. The specific cause of diphtheria is a microorganism known as the Klebs-Loeffler bacillus or more recently in the new nomenclature, "*Corynebacterium diphtheriæ*."

Since this microorganism may attack the mucous membrane of nose, throat, upper respiratory passages, conjunctiva and vagina, and may occasionally cause wound diphtheria, the discharges from any of these surfaces may harbor the infective material and act as a vehicle for its spread.

In considering the mode of transmission the most important factor in the manner of direct spread is the dissemination of droplets of saliva, by talking, coughing and sneezing. The fingers contaminated with infective discharges or saliva bearing the organism may infect a susceptible person. Young children in which group we find the largest number of susceptibles are more likely to "swap saliva" through the means of common drinking cups, toys, pencils, etc.

Indirectly the spread of the disease may be brought about by articles and clothes wet with the discharges of an individual case, a convalescent or carrier. Milk also may be a cause of spread of the disease. The diphtheria bacillus thrives in milk growing rapidly at optimum temperature and slowly at room temperature. Unfortunately the milk harboring the organisms does not give any warning such as a characteristic taste or odor. This is one of the strong arguments for pasteurization or extreme carefulness and cleanliness in the handling of raw milk. The diphtheria organism may resist an apparent temperature of 95 degrees to 100 degrees C for an hour in the scum which forms on the surface of milk heated in an open vessel. The scum is of course much cooler than the milk below it.

The incubation period of diphtheria depends upon virulence of the organism, the individual susceptibility—since immunity is a relative thing—and the amount or dose of the infective agent. Sometimes nurses will contract the disease in a few days after coming in contact with a case but in other instances may go for a considerably longer period. There are stories told in other instances of tracheotomy tubes becoming occluded and the doctor in an effort to clear it aspirating the contents into his mouth. In every instance of this kind the disease developed in a few hours and usually proved fatal. Some writers think there is a healthy carrier stage which precedes the development of symptoms thereby prolonging the incubation period. It is generally conceded that the incubation period will range from two to five and possibly seven days.

The disease may be communicable for weeks after a patient is apparently well depending upon the disappearance of the bacilli from the discharges of the lesions. Ordinarily the great majority are non-infectious in two to three weeks after the lesions in the nose or throat have healed.

Before a convalescent is allowed to go from quarantine there should be two consecutive negative cultures from nose and throat swabbings not more than 24 hours apart nor before the 9th day.

As to viability of the diphtheria bacillus, the organism does not live long when exposed to drying or sunlight provided it is unprotected by an albuminous covering. Vaughan states that if a thread is dipped in virulent cultures of *B. diphtheriæ* and allowed to dry in direct sunlight the organisms soon become inert. The organisms are not destroyed by freezing temperatures and they may live for months and keep their virulence when in a diphtheritic membrane, or on cloth containing discharges from the throat.

Diphtheria is largely kept in existence by persons who carry virulent organisms. Theoretically the carrier problem should be easily solved since we have at our disposal laboratories to diagnose carriers, tests to determine the virulence of the organism and the Schick tests to determine the susceptibles. Convalescent carriers may harbor virulent strains of the organisms for three or four months after the clinical symptoms have disappeared. Contact carriers, persons who attend the sick or come in contact with a case, are often temporary. The healthy chronic carrier is the real menace. Nichols states that in the general population less than one in one thousand are carriers of virulent organisms, and that among children about two per cent are carriers. Infected tonsils and adenoid tissues are thought by most writers to be responsible for the condition which renders a person a carrier.

As to the susceptibility of population, babies under six months of age have a high degree of immunity to diphtheria. The disease takes its greatest toll from the ages of six months to five or six years, then falls gradually until about twelve years of age and from then on the curve falls rapidly. Weather conditions such as dampness and cold, which are more conducive to catarrhal inflammation of the upper respiratory tract, seem to increase the incidence of the disease. Diphtheria is more prevalent in the northern hemisphere than the southern. The colored race seems to have a higher degree of immunity than the white. Diphtheria is more prevalent in the fall and winter months but epidemics may run over into the summer months and take a great toll of lives. Epidemics are more liable to start in the poorer districts where people live under crowded conditions, in damp dwellings and insufficient sunlight.

The curve of the general trend of diphtheria in Indiana is going down. It is interesting to note there are small peaks in this curve which occur roughly about every five or six years. Since 1919 in Mooseheart, Illinois, a city of children, it has been the practice to immunize all children immediately upon admission. The result has been that they have held their incidence of diphtheria down to only three cases, one resulting in death,

in the past ten years. One case had been immunized only one month before, one had been overlooked and one had been immunized three years previously.

- Can Indiana wipe out diphtheria?
- Yes:
- (1) By physicians and other persons interested in public health educating parents to have all children over six months of age immunized.
 - (2) By Schick testing six months after immunization to see whether the child is protected against diphtheria.
 - (3) By use of antitoxin at the earliest possible moment in clinical cases.
 - (4) By the use of prophylactic antitoxin in exposed susceptible persons.
 - (5) By the use of the laboratory in preventing and controlling carriers.
 - (6) By prompt and accurate reporting of all cases when first seen.

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SPECIAL ARTICLE

DIPHTHERIA DEATHS IN 1930 OCTOBER

Thirteen deaths in October from diphtheria. This is the highest number since February but is not unexpected at this time of year. A rather large number of cases have been reported so far in November and it will require close attention to hold the deaths down.

Floyd and Pike counties break into the black list for the first time. Lake county brings its total number of deaths up to 16. Knox county had two deaths, making a total of seven. This is easily the highest rate in the state and should call for drastic action on the part of the health authorities, the medical profession and the parents of that county. There have been 99 deaths in the ten months of 1930 which means that we are going to set a new record unless a very disastrous epidemic breaks out. In other words "Hold Everything!"

We are giving below a list of the counties which have had diphtheria deaths and the number in each.

| | Total for 1930 | Octo- ber | | Total for 1930 | Octo- ber |
|----------|----------------------|--------------|------------|----------------------|--------------|
| Allen | 2 | 0 | Howard | 1 | 0 |
| Clark | 4 | 0 | Jay | 2 | 1 |
| Clinton | 1 | 0 | Knox | 7 | 2 |
| Daviess | 1 | 0 | Lake | 16 | 4 |
| Dearborn | 1 | 0 | Laporte | 2 | 0 |
| Delaware | 2 | 0 | Lawrence | 6 | 0 |
| Dubois | 1 | 0 | Madison | 1 | 0 |
| Elkhart | 2 | 0 | Marion | 13 | 1 |
| Floyd | 1 | 1 | Miami | 1 | 0 |
| Fulton | 1 | 0 | Monroe | 4 | 1 |
| Gibson | 1 | 0 | Montgomery | 2 | 0 |
| Greene | 1 | 0 | Morgan | 1 | 0 |
| Hamilton | 1 | 0 | Perry | 1 | 0 |

| | Total for 1930 | Octo- ber | | Total for 1930 | Octo- ber |
|------------|----------------------|--------------|------------|----------------------|--------------|
| Pike | 1 | 1 | Tipton | 2 | 0 |
| Porter | 1 | 0 | Vanderburg | 5 | 0 |
| Randolph | 1 | 0 | Vigo | 2 | 1 |
| St. Joseph | 4 | 1 | Warrick | 1 | 0 |
| Spencer | 1 | 0 | Wayne | 1 | 0 |
| Sullivan | 2 | 0 | White | 1 | 0 |
| Tippecanoe | 1 | 0 | | | |
| | | | Totals | 99 | 13 |

ABSTRACTS

THERAPEUTIC VALUE OF DIGITALIS IN PNEUMONIA

JOHN WYCKOFF, EUGENE F. DU BOIS and I. OGDEN WOODRUFF, New York (*Journal A. M. A.*, Oct. 25, 1930), report the results of their study of 742 patients; 338 received digitalis; 404 did not. There was no evidence that routine digitalis therapy in lobar pneumonia results in a lowered mortality; in fact, the mortality was a little higher in the digitalized group than in the non-digitalized group. In pneumonia patients with sinus rhythm the only consistent evidences of digitalis effect are electrocardiographic changes and mild toxic effects. About 95 per cent of patients have sinus rhythm throughout the course of lobar pneumonia. Clinical symptoms of digitalis toxicity are not a sufficient guide in digitalis therapy in lobar pneumonia to prevent increase in mortality when the drug is used. The amount of the drug given is a better guide. When given in dosage too small to show any effect, it causes no changes in mortality. When given in dosage comparable with the amount usually needed in the treatment of heart failure, it produces effect on the P-R interval and T wave of the electrocardiogram but causes little change in mortality. Digitalis may perhaps be life saving in an occasional patient with auricular fibrillation or auricular flutter. Auricular fibrillation and auricular flutter occur rarely, in less than 5 per cent of all cases. Patients developing this condition frequently recover without digitalis. It is concluded by the authors that the routine giving of digitalis to patients with lobar pneumonia is dangerous.

LYMPHATIC LEUKEMIA

GEORGE J. BUSMAN and ARTHUR R. WOODBURNE, Pittsburgh (*Journal A. M. A.*, Oct. 25, 1930), report a case with a generalized follicular papular eruption. The individual lesion was a discrete keratotic papule capped by a small horny spine and surrounded by a narrow erythematous margin. The histopathologic structure was that of miliary, submiliary and early conglomerate tuberculosis. There was an associated blood picture of a typical chronic low grade leukemia. The blood showed: hemoglobin, 80 per cent; erythrocytes, 5,650,000; white blood cells, 24,400 per cubic millimeter. The differential count was: polymorphonuclear neutrophils, 12 per cent; eosinophils, 1 per cent; small lymphocytes, 83 per cent; large lymphocytes, 3 per cent, and transitionals, 1 per cent. After roentgen-ray exposure of one skin unit in divided doses to the entire skin surface, there was a rapid decrease in leukocytosis and improvement in the relative percentages of white blood cells. During and after a total of twenty-four semiweekly, weekly or biweekly injections of spleen extract, the cutaneous and blood pictures returned to normal and have remained so after eighteen months' observation. Clinically the skin lesions were rather suggestive of a generalized lichen scrofulosorum. However, the absence of grouping, the age of the patient, the failure to demonstrate active or healed tuberculosis the true tuberculosis histopathologic architecture, and a lymphatic leukocytosis out of proportion to that of general and cutaneous tuberculosis ruled out this diagnosis. The authors cannot prove whether the blood picture was the primary pathologic change and the skin expression secondary, or vice versa. In view of the fact that tuberculosis structures are found not only in tuberculosis but also in many other infections, when allergic conditions are present, they believe that this case is one of a chronic, low grade, lymphatic leukemia in which the cutaneous eruption is that of a leukamid with a definite tuberculomatous architecture.

THE JOURNAL*of the***Indiana State Medical Association**

Devoted to the Interests of the Medical Profession of Indiana

ALBERT E. BULSON, M.D., Editor and Manager

Office of Publication, 406 W. Berry St., Fort Wayne, Ind.

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EDITORIALS**IMPROVED METHOD OF INDUCING
ANALGESIA IN LABOR**

Significant improvements in the administration of rectal analgesia for the relief of pain in child birth recently were announced by the obstetrical department of the Indiana university school of medicine. During the past two years physicians connected with the department have developed apparatus for the administration of the treatment which makes its use safe for both mother and child, and clearly indicates that no woman using the treatment need be in hard painful labor without relief. The first improvement by Indiana university physicians in the apparatus for the administration of rectal analgesia came two years ago, and at that time it was regarded as a distinct advance over anything previously used. More recently a still further improvement was made by another member of the obstetrical department.

"In view of the great interest aroused by an article on 'relief of pain in child bearing' which is printed in a current periodical," says the announcement from the Indiana university obstetrical department, "it would seem that the public is obtaining this information very late. As is stated in the article referred to, rectal analgesia has been used rather widely for several years. For at least five years it has been used at the Robert W. Long and Coleman Hospitals, Indianapolis. Two years ago one of the physicians connected with the obstetrical department of Indiana university developed an apparatus for the administration of this treatment, which was a vast improvement on anything up to that time devised. Just recently another very simple and satisfactory apparatus has been devised for the same purpose by another member of the obstetrical department.

"Rectal analgesia now has reached a very definite place in the equipment of any first class maternity. Twilight sleep enjoyed a short period of popularity, but was doomed to drop back to where it is used but rarely on very specially selected cases. It could not stand the critical investigation of conscientious obstetricians as it was soon found to be somewhat dangerous for

both mother and baby—especially the latter. With rectal analgesia we can now render the pains of child birth very much less severe. No one claims for it a painless child birth, but we do claim the women who have had babies without this treatment and later with it are unanimous in their statements that it was a great relief and no one has wanted to have another labor without it. It is very safe for both mother and child, and with the present developed methods of administration, it would seem that no woman needs to be in a hard painful labor without relief. The obstetrical department of Indiana university brought this to the medical school and to Indiana, and has done much toward developing the method of administration."

**CHARITY MEDICAL AND SURGICAL
SERVICES EXPENSIVE**

The medical profession always has taken a great deal of pride in the fact that it has rendered a large amount of charity services to the poor. We have been disposed to hold our profession up as a model of unselfish devotion to public welfare, for which public recognition often is delinquent. In so far as the actual rendering of service is concerned, the facts amply justify our contention. The amazing amount of time and energy which the staffs of charitable hospitals devote to the public health without remuneration is proof of our altruistic traditions. Modern life, however, has brought into the situation some factors that seriously raise the question of the advisability of our present methods of rendering professional services to the indigent poor of the community. Society always has recognized its obligation to care for its sick poor and restore him to health as soon as possible, without cost to him. This is both altruistic and good economics. A healthy poor man is not necessarily and usually not at all a burden to the community; a sick poor man is always a liability, hence it is good business to get him well as soon as possible. To do this modern medicine requires very expensive hospitals and elaborate equipment, and state and municipalities have been generous in their response to requests for such aids.

From the standpoint of the state or municipality the problem is a simple one. All it asks and all it wants is that those entrusted with the problem of restoring the sick poor to productive and pleasurable health accomplish the result at the least per capita cost. This is what the state asks of our charitable hospitals, and no doubt thinks it is getting. What is more natural than to assume that because all the medical and surgical work done in an institution is without cost to the public, it follows that the state is thereby relieved of a heavy financial burden in caring for its sick poor. We believe that it can be shown that this assumption is a fallacy and that as a matter of fact so-called free medical and surgical services

in our charitable hospitals, whether administered by the state or by a municipality, is a very expensive type of service to the state. A trained cost accountant can go into any such hospital and show free medical service as a costly service to the state. This fallacy does not occur on account of the quality of professional service rendered in these institutions. These services are often of the highest character and rendered with the same care and skill as though well paid for. The loss occurs in the question of hospital turnover, or the necessary number of hospital days per patient. In the last analysis the turnover will depend very largely upon the visiting staff at a hospital. The speed with which he gets to work on new cases, and the promptness with which he can bring to bear the hospital's routine on the patient's needs will determine the length of stay in the hospital. Each day costs the state from \$3.50 to \$3.75. Unnecessary hospital days therefore are very expensive. Speed and promptness in caring for new cases in charitable hospitals is notoriously neglected, and criticism for this neglect can hardly be entertained. Nobody can ask a physician to neglect his paid work to care for charity work, and he does not do it. He does his hospital work in charity hospitals at such times as he can find that results in the least economical loss to himself. As a result it follows that all those factors which result in a rapid hospital turnover are neglected, and hospital days per capita are greatly increased beyond the patient's actual needs for his recovery. A paid medical personnel would decrease hospital days per patient to a point that would result in great saving to state or city, with no loss to the community in value received for such services.

A recent study of a series of gall-bladder surgical cases in a charity hospital showed that 100 operative cases had an average of 31 hospital days. This is approximately twice as long hospitalization as a similar series in a private hospital. This series therefore represents 1,500 additional hospital days over what is regarded as necessary hospitalization for pay patients, and reasonably can be regarded as unnecessary for the non-pay patients. At \$3.75 per day this amounts to \$5,625.00. If this analysis of the cost of hospitalized patients under the care of the state or city is correct it simply shows again that you cannot get something for nothing, not even medical service.

What we have had to say is not intended in any sense as a criticism of the present management of any state or municipal hospital or the attitude of any hospital toward charity patients, but represents facts relative to the cost of medical and surgical cases. We are convinced that the state, county or municipality could save money and probably get better service if they would pay the visiting staff.

ANIMAL EXPERIMENTATION IN DANGER

Numerous attempts have been made in the past to suppress animal experimentation by law, but so far all efforts have failed. However, at the present time there is a bill pending in Congress that threatens to be a serious matter unless suitable effort is put forth to prevent favorable action in passing the bill. In reality the bill, which has gotten out of the Committee of the House, has been very adroitly worded and is aimed at those experimenters who use dogs. In most of the arguments put forth by those who are opposed to animal experimentation there is a total disregard of consistency or reason, and the more rabid of the number do not hesitate at the rankest kind of deception and even downright falsehood. Some of the opposition has been brought about as a direct result of useless and idiotic experiments on animals, while still more opposition is stirred up through sympathy and sentiment purposely aroused by false stories concerning cruelty exhibited by the animal experimenters no matter how humanely the work is done. Unquestionably animal experimentation should be controlled and permitted only under such safeguards as will prohibit not only cruelty but useless experimentation, and there should be a law enacted that will give accredited scientists or scientific institutions the right to use stray dogs for controlled animal experimentation. Provision should be made for the protection of the pet dog, for anti-vivisection has as its sponsors a few very prominent and wealthy people who have learned or think that they have learned that pet dogs have been sacrificed by some animal experimenters, and in more than one instance of this kind the anti-vivisectionists have profited by donations of thousands of dollars to be used in fighting animal experimentation.

What the members of the medical profession should do is to offset all of this hysteria and misrepresentation by presenting in a logical way the facts concerning what animal experimentation has done for not only the human but animal race. Our present knowledge concerning the successful treatment of diabetes and pernicious anemia has been due to the results of experimentation on dogs, for in reality the dog is the only animal that is useful in the study of those two diseases. The invaluable aid that has been given to patients suffering from diabetes and pernicious anemia through the results of animal experimentation should be pointed out to our lawmakers who have to consider the bill now in Congress which specifically refers to experimentation on dogs. However, it should be remembered that the bill now before Congress and applying to the District of Columbia is purely an entering wedge for more radical legislation to prevent all animal experimentation of whatever kind or description, and if the anti-vivisectionists can secure legislation favorable to their cause that applies to the District of Columbia it will be but another step to initiate and perhaps bring into

effect legislation in the several states where it would be a powerful weapon in their hands to say that the United States government has forbidden animal experimentation in the District of Columbia. Let no physician interested in scientific advancement overlook the seriousness of the situation. Our state medical association, our county medical societies, and the individual physicians of the state should bring pressure to bear upon representatives in Congress to the end that no radical anti-vivisection legislation shall pass.

OXYGEN AND CARBON DIOXIDE IN THE TREATMENT OF PNEUMONIA

Matthew S. Sloan, president of the New York Edison System, has announced the cure of numerous cases of pneumonia in which physicians of the electric companies of the System cooperated with attending physicians in administering a treatment based on procedure for resuscitation from electric shock. The treatment is the administration by inhalation of a mixture of oxygen and carbon dioxide. This so abates the congestion of the lungs that the patient gradually becomes able to breathe normally.

"This treatment is part of our present procedure for taking care of victims of electric shock," said Mr. Sloan. "Its application to pneumonia has been carefully tested. The results obtained have impelled us to lay our experience before the medical profession and the public.

"About a year ago, our supervising physician gave a talk before the Kings County Medical Society in which he described our resuscitation practice, saying that one phase of it—inhalation—was indicated for pneumonia cases. A month or so later, a Brooklyn physician who was treating a desperate case of pneumonia thought that the part of our procedure which dealt with inhalation, as described in our physician's talk, might be effective in the case he was treating. He called on us for help. We gladly supplied him our facilities. A speedy and complete cure was effected.

"Since then we have been called on by physicians to furnish facilities in similar cases. Our physicians now have a record of 127 cases in which the treatment has been used. Of these, forty-two were beyond recovery when our people were called in. Of the remaining eighty-five where there seemed a chance of recovery, however slight, seventy patients were cured and only fifteen died. In treating our own employes for pneumonia, the physicians have been completely successful as five employes were treated and all were cured.

"The treatment is simple and embodies no secrets. It consists in the administration of a suitable mixture of oxygen and carbon dioxide. It has been advocated by Dr. Yandell Henderson of the Medical School of Yale University for several years. This is the first time, however,

that it has been tried in an organized way and in so many cases."

THE COFFEY-HUMBER CANCER TREATMENT

Much has been said and written concerning the Coffey-Humber treatment for cancer which unfortunately received so much uncalled for and misleading publicity in the lay press as well as a certain amount of consideration in medical circles. At the present time the evidence seems to indicate that the so-called cure is not a cure and that even its efficiency in palliative treatment is exceedingly doubtful. As might be expected there is a lot of hysterical and nonsensical accusations against the medical profession by certain lay editorial writers, brought about as a direct result of refusal on the part of the profession in general to accept the claims put forth by the sponsors of the cure, whereas the thinking, analytical investigators in the medical profession invariably are open-minded and fair in their decisions but refuse to take snap judgment on something that does not offer conclusive evidence as to its merit. The fact that the Coffey-Humber cure was announced with a blare of trumpets and circus-like advertising, is quite sufficient to make thinking medical men skeptical, and especially when there was and is at the present time such a woeful deficiency of trustworthy evidence as to the value of the so-called cure, which if it really possessed such virtue could well await more rational efforts of introduction to medical profession and public. *The Journal of the A. M. A.* (Nov. 1, 1930) makes an appropriate comment when it says:

"The history of investigations of new methods for the treatment of cancer is marked, as every physician knows, by the wreckage of dozens of scientific reputations, by the bodies of patients who choose to live or probably to die under experimental methods rather than to take their chance for prolongation of life under the old ones, and by bitter although sincere controversy among scientific men. Such conditions establish again the importance of provision within organized medicine for careful study and judgment of new methods before they are given circulation to the medical profession or to the public. Had the proponents of the Coffey-Humber method seen fit from the first to follow established custom in the introduction of their technic and their results, had they consulted the Council on Pharmacy and Chemistry as to the proper method of introducing a new proprietary, they might have avoided all the acrimony, the criticism, and certainly all the notoriety that has been their lot."

TEACHERS SUPPORT OPTICIANS

For many years we have been receiving reports concerning the activity of a few of the superintendents and teachers in our public schools in

trying to foist the services of certain members of the pseudo-medical cults, and even Christian Scientists, upon public school pupils. In one instance it is reported that a teacher went so far as to condemn vaccination as a preventive of smallpox, and recommended that a bizarre and worthless treatment given by a pseudo-medical practitioner should be employed "To cleanse the blood and prevent smallpox or any other contagious or communicable disease." We also have heard that teachers in the public schools who believe in the Christian Science faith are advocating the non-wearing of glasses by children, and attempting to convince sick pupils that they really are not sick but merely imagine they are sick. Now comes a report showing the other extreme, in that some of the Indiana superintendents and teachers are advocating that all pupils in the public schools should have their eyes examined and glasses fitted by a favorite optometrist who claims that no person's eyes are optically perfect and that if school children are to do their best work they must wear glasses. It is reported that an optometrist has been invited to examine and fit glasses to the eyes of pupils in the public schools of a populous county if the parents will pay for the service. We are advised that the work is well on its way and that the optometrist is reaping a golden harvest of shekels as a direct result of the cooperation of school teachers. As a part of the program, the children who already wear glasses, perhaps prescribed intelligently and accurately by medical eye specialists, are advised to have their eyes re-examined by the optometrist "so that the right glasses will be furnished." Very naturally the optometrist finds no glasses but his own that are correct and the parents are advised to throw away what already has been obtained and procure glasses from the optometrist. If the reports are true, and we think they are trustworthy, the prices charged for the glasses are exorbitant, being anywhere from two to six times as much as would be charged by any competent eye specialist.

Perhaps it would be pertinent to put out an inquiry as to what the teachers get out of this proselyting for the optometrists, but of far more importance is the inquiry as to why the teachers should be permitted to exercise such a harmful influence in our public schools. We recognize the fact that the service of some of the medical advisors in our public schools are not as trustworthy as they should be, and that sometimes judgment not in keeping with present-day knowledge is used, but what does the profession as a whole think of this proselyting on the part of school teachers for the medical pretenders and commercialists among spectacle venders? What do intelligent parents think of the procedure? As a matter of fact, the public schools should not be commercialized in the interest of any individual, and if in the interest of public health it seems necessary or advisable to have the eyes of school children examined then it is the part of consist-

ency and reason to have such examination made by medical eye specialists, and if attention of any kind is needed that fact should be transmitted to the parents, with no further recommendation than that the matter be given appropriate attention through the family physician who if he has been educated and trained according to present-day standards will advise procuring of the services of a medical eye specialist. The teachers in our public schools have neither moral nor legal right to stipulate or recommend measures concerning the welfare of pupils in the public schools, whether such measures meet the approval of present-day standards or not. This applies, of course, to those measures that have to do with the health, comfort and happiness of the individual layman.

The fact of the matter is the pupils in our public schools get too much misinformation and too much guidance that in no sense belongs to a liberal education. This subject should be a fertile field for discussion in parent-teacher clubs, and the harmful activities of school superintendents and teachers should warrant suppression on the part of school boards.

EDITORIAL NOTES

DEAR DOCTOR:

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Now is the time for paying your Association dues for 1931. *Do not delay.*

THE JOURNAL wishes every one of its readers a Merry Christmas and a Happy New Year.

THE Philadelphia session of the American Medical Association will be held June 8 to 12, 1931.

SAID one man to another, "Since I became acquainted with the charming wife of a doctor I have been eating an apple a day. But it didn't work! Look at this black eye of mine!"

AN attempt will be made by the druggists to repeal the "Bone Dry Law" of Indiana so that alcoholic beverages may be prescribed as medicinal agents. That is a movement that will interest the medical profession.

WRAPPING cheese in tinfoil is declared by a London correspondent of the *Journal of the A.M.A.* to be a potential danger, and manufacturers

are advised to prevent contact between the cheese and the tinfoil by interposing grease-proof paper or by some other means.

THE year's index will be found in this issue of THE JOURNAL. Those who bind their journals should do the work now while all of the numbers are available. As long as they last we shall be pleased to send any missing numbers of the year to our regular subscribers.

APROPOS of our remark concerning patients waiting in a doctor's office one of our medical friends says that "the worst kicker is the ne'er-do-well who finds that waiting in a physician's office for much needed services interferes with the time regularly devoted to indoor golf."

AGAIN we wish to remind secretaries of county medical societies that they are the logical correspondents of THE JOURNAL for their individual communities. New notes and personals as well as doings of the county medical society should be reported and will be given space in THE JOURNAL.

DELINQUENCY in the payment of your medical society dues may prove to be very expensive if you happen to render medical or surgical services during the period of delinquency that serve as a basis for a malpractice suit. However, avoid delinquency for other reasons which every self-respecting physician must give favorable consideration.

THE Board of Medical Registration and Examination will be more effective in enforcing medical practice acts if county medical societies will cooperate in furnishing evidence concerning illegal practices. At present the Board receives few complaints and in consequence illegal practitioners oftentimes thrive longer than they would if the Board received information earlier.

IT is reported that Dr. William J. Mayo said to one of his assistants who was leaving the clinic, "Seventy-five percent of your ultimate success in life will depend on your ability to handle people; twenty-five percent on your knowledge of medicine. Try to excel in both." In the final analysis this means the ability to understand and deal with people as human beings and not alone with their diseases.

THE *British Journal of Experimental Pathology* is authority for the statement that a single application of carbon dioxide snow to an area of skin which is in a precancerous condition may precipitate the development of a cancer. Therefore, it is not unreasonable to conclude from the present experiments that the use of carbon dioxide snow for the treatment of precancerous lesions of the skin may not be entirely devoid of risk.

AN Indianapolis layman squealed like a stuck pig when he was charged \$2.50 for treatment and medicine for an acute coryza that made him perfectly miserable, and from which treatment he admitted receiving great benefit. Two nights after his contact with the physician he paid \$3.85, plus \$.50 commission, making a total of \$4.35, for a ticket to a bum show from which he did not even receive amusement. "Consistency, thou art a jewel."

VERY soon you will be called upon to assist your legislative committee in getting your representatives and senators in the state legislature interested in suppressing vicious legislation pertaining to any feature of the practice of medicine, furtherance of public health, or medical education, and perhaps you will be asked to use your influence in getting new medical legislation on our statute books. Anyway, whatever you are asked to do—do it promptly and cheerfully.

THE "talkies" are being used by the A. M. A. at annual sessions. From an educational point of view nothing could be better than the moving picture talking film, and it is hoped that the feature will be developed and elaborated. Indiana physicians will be interested in knowing that Dr. Charles P. Emerson, dean of the Indiana University School of Medicine, has been made a member of the committee appointed by the trustees of the A. M. A. to consider the project and offer recommendations.

A PHYSICIAN residing in an adjoining state and having a relatively large practice has been severely criticized for what he calls the systematization of his business by having what he terms his "insulin days," when all of his diabetic patients come in for treatment, a "neo day" when all of his syphilitics come for treatment, and perhaps other days set aside for special work, but he comes back with the statement that surgeons have their special operating days so why shouldn't the general man have his special days?

A BILL has been offered in New Jersey providing for liens in favor of hospitals, physicians and nurses for the care of persons injured in accidents, on any judgment or settlement obtained by the injured person by reason of the accident. As we have before pointed out in THE JOURNAL we need such a law in Indiana. The undertakers are protected, but no one else, and people injured in automobile accidents, even though able to pay, usually find some way of getting out of paying the hospitals and the doctors.

ENTERTAINMENT at the annual session of the A. M. A. is to be in charge of two physicians appointed by the board of trustees, and all expenses incurred in entertainment will be borne by the American Medical Association. This is a

step in the right direction for it relieves the local medical profession of what previously has been a very great burden, and, on the other hand, it makes the Association absolutely independent in the selection of a place of meeting and facilities for carrying on the work of the Association.

IN the "spend now" campaign which recently has been raging all over the country many persons having a fixed income have been asked to pledge themselves to spend more. One man occupying a salaried position wrote on his card, "My God! Spending is what put this country in its present state of depression and nearly ruined me. It takes all I can earn now to make payments on what I bought a year or so ago, and my position is like the position of millions of others. We have been on a spending jag, and now we must sober up and take the headache that goes with it."

WE have just received a letter which says, "At the present time we have a drive on to inject toxin antitoxin into every kid whether he wants it or not. The Y. M. C. A. and the Y. W. C. A. are instructing the boy and girl scouts how to use the hypodermic needle. The scouts are going to do the immunizing. And all this is sanctioned by the local medical society."

That is preventive medicine with a vengeance! Why not issue a little booklet, entitled "Be Your Own Doctor," and in it tell the public how to treat themselves for any disease or abnormality of the human body.

A UNITED medical profession should be the dominating factor in all enterprises that have anything to do with any phase of individual and community health. Especially is it necessary for closer cooperation in the work of the State Board of Health, the University School of Medicine, and the State Board of Medical Registration and Examination. This is particularly necessary in connection with the oncoming session of the legislature. We have offered these enterprises space for separate departments in THE JOURNAL for the discussion of problems and matters of mutual interest. We are waiting for some response.

HEALTH education over the radio should not be revenue producing for the individual giving the talk. To be most effective and valuable health talks should be free from personalities, personal advertising, or personal exploitation. Health talks should be under the auspices of some reputable medical society, and if the question and answer feature is introduced then the answers should be under the auspices of the medical society rather than the individual. It is unfortunate that some medical men who have been asked to give health talks over the radio have taken advantage of the opportunity to exploit themselves.

DRUGGISTS have developed the slogan, "Your druggist is more than a merchant", to which the editor of the *Journal of the Tennessee State Medical Association*, in the August issue, replies, "He certainly is. He is a patent medicine vendor. He is a counter-prescriber. He prescribes drugs of which he knows little for diseases of which he knows nothing. He is a restaurant keeper. He is a soft drink vendor. He is a tobacco-salesman and many other things besides." Perhaps we might go so far as to reiterate a statement of Will Rogers to the effect that the average drug store keeps everything but drugs, and to a considerable extent is a miniature department store.

FROM a foreign journal published in southeastern Europe and having an unpronounceable name, the *Journal of the A. M. A.* for August 9, 1930, page 461, quotes an author who uses quinine in the treatment of lobar pneumonia. Out of fifteen patients treated, fourteen had favorable results in that the crisis came sooner than it would under ordinary circumstances, and the general condition of the patient was better. In two cases especially the treatment was successful in that favorable results were perceived on the sixth day, and two days after the crisis the patients were discharged from the hospital. The patients were given five-tenths c.c. of a fifty per cent solution of quinine.

A SPEAKER at the session of secretaries and editors of state medical associations, held in Chicago recently, called attention to the fact that the rank and file of the medical profession does not know how much time and effort is given to work on their behalf by the various officers, members of councils, and committees representing the American Medical Association and the various state medical associations. All of which is true and always will be true, but, worst of all, much of the work done in behalf of the medical profession is not appreciated and oftentimes is criticized unnecessarily and unjustifiably. Constructive and friendly criticism is all right but there is too much of the other kind.

THE entire medical profession is obliged to bear the brunt of criticism caused by dereliction and incompetency of a few in the profession. In consequence it should be the duty of every county medical society to prohibit or limit as much as possible infractions of the rules of ethics and decency by members of the individual societies. This can be done by disciplining and penalizing those found guilty, and more often than otherwise by friendly counsel and advice without creating any ill feeling. We often have wondered if a committee on ethics could not do a great deal to stimulate right conduct and dissipate many criticisms or jealousies brought about through unbecoming conduct on the part of some of our confreres.

A PHYSICIAN in an adjoining state who is reputed to give attention to several hundred office patients each day, all attention being of the lick-and-promise type, was consulted by an Indiana resident who after receiving about five minutes of the celebrated (?) doctor's time and "prescriptions five and thirteen" to be filled at the doctor's personally owned drug store, was asked to return once a week for treatment. Recognizing the inadequacy and utter uselessness of the attention given, and being somewhat of a wag, the patient wrote the physician saying that so far as dependable service was concerned he thought that his picture would do just about as well as his own person, and he offered the suggestion as a solution to the problem of making weekly trips for attention.

AN attractive young woman has been calling on a number of physicians in the city of Seattle, Washington, purporting to be an insurance representative.

She tells the doctor that her company has not yet selected an examining physician in this city but that she has a dozen or more applicants for insurance and asks the doctor if he will do the examining. Upon his consent she explains that it is necessary for the examining physician to join the association, the cost of which is \$5.00. After the \$5.00 is paid the "insurance representative" disappears and is seen no more, nor do the applicants for insurance ever appear for examination.

The young lady is described as having an attractive personality and walks with a decided limp, apparently from a stiff knee.—*Bulletin from Better Business Bureau, Seattle.*

MEDICAL writers everywhere are pointing out that the miscellaneous use of ultraviolet radiation upon the human body is to be deplored and should not be encouraged. However, athletic clubs, the Y. M. C. A., the Y. W. C. A., and even social clubs having athletic departments are in the majority of instances using ultraviolet radiation without rhyme or reason and oftentimes with much harm to the one receiving the treatment. Even drug stores and department stores are selling ultraviolet lamps, some of the lamps good and some of them worthless, to a public that has been beguiled into thinking that sunshine and a vacation can be created artificially in one's own home. Manufacturers, with their idiotic and misleading advertising, have done much to create this demand and the public pays the penalty. Medical men have a duty to perform in trying to stem the tide of ill effects that may come from the ill-advised use of what in some cases is a valuable agent.

WE get sick and tired of hearing about the impositions practiced on physicians by welfare organizations in asking for so much unjustified charity which, in the final analysis, breeds dependency and pauperism with its attendant in-

crease in general taxation. Caring for the *indigent sick* is a community responsibility and the community should pay reasonable compensation for the services rendered by members of the medical profession. Caring for the *sick poor* may be relegated to the medical profession with a certainty that the medical services will be rendered at a cost that is in keeping with the ability of the patient to pay. However, up to the present time no agency has put forth the proper effort to determine with analytical care the needs of the sick poor and the ability of the sick poor to pay something for appropriate medical attention. That is a problem for the medical profession to solve and it should be solved very quickly.

THE principles which have been adopted by the Committee on the Cost of Medical Care as a basis of recommendations to be made in the future for solving the specific problems coming within their purview are as follows: "1. The personal relation between physician and patient must be preserved in any effective system of medical service. 2. The content of medical service of the community should include a systematic and intensive use of preventive measures in private practice and effective support of public health work. 3. The medical service of the community should include the necessary facilities for adequate diagnosis and treatment."

On the face of it this looks as though it would be entirely satisfactory to the members of the medical profession. We shall be interested in knowing how far the Committee goes in upholding these principles. Unless all signs fail, we believe that the preservation of private practice will be a matter of minor concern and in the end some socializing scheme will be recommended.

SEVERAL county medical societies in Indiana have adopted the deferred payment plan for the payment of accounts for professional services rendered. The public seems to be educated to the point where installment paying, usually secured by note, is acceptable, and there is no reason why medical men should not fall in line and receive payment for overdue accounts in such manner. In one county an attempt is being made to have the collections made through a bank in the same manner that automobile financing is done. The debtor accepts the deferred payment plan, giving notes for the amount due, which upon endorsement by the physician may be used for credit at the bank. The debtor seems to feel more keenly about his obligation if the bank is the collector. On the other hand, the physician realizes on his accounts promptly, and even if some of the notes are not paid and he has to redeem them he is no worse off than he was in the beginning, and is ahead to the extent that he has had the use of the money.

THE time ordinarily allotted for a medical paper is twenty minutes. The long-winded speaker, with

his iteration and reiteration, who takes up twice the time allotted to him, or if his paper requires but twenty minutes for presentation has the nerve to ask for an extension of time to present stereopticon slides which may require twenty minutes or a half hour more, deserves and should be blacklisted by all societies before which he asks to speak. We do not refer to any one who is listed as the principal speaker and not limited as to time, though even he should not overstep the bounds of propriety and the patience of the listeners. To take more time than allotted is not only discourtesy to the society acting as the host, but is an injustice to subsequent speakers on the program. Furthermore, the presiding officer who permits any speaker to monopolize more time than he rightfully should have is a poor presiding officer. We have seen so many examples of this unequal distribution of time to those who take part in medical programs that we feel that it is time for program committees and presiding officers to emphasize the importance of following rather definite rules, and we do not care how big a man is or thinks he is, if he oversteps all reasonable rules of courtesy and fair play he should be rebuked.

MANY Indiana counties have a county hospital directed and maintained by public taxation. Under the law any licensed physician in the county may work in the county hospital. In most of the county hospitals the county medical society is the attending staff of the hospital, and the meetings of the county medical society are combined with the meetings of the staff of the hospital, which of course is an ideal and satisfactory arrangement. However, in the cities where there are several hospitals, different arrangements are made to suit the different conditions, but an honest effort should be put forth to have the combination of the county medical society meetings with staff meetings in the different hospitals whenever possible. In some cities there is a tendency toward conflict in the meetings of these organizations, to the detriment of one or the other. If staff meetings are held often and with interesting practical programs, then the meetings of the county medical societies usually suffer in attendance, as many doctors feel that they do not have the time to attend so many medical meetings. Cordial cooperation of all is necessary if best results are to be secured, and the plan whereby county medical society meetings alternate with staff meetings seems to be a very sensible arrangement and one that is followed in many of the larger cities.

AN editorial on "Dieting," in the *Journal of the A. M. A.* for October 18th, 1930, based on scientific study of the problem, summarizes by saying that any one can stay thin or lose flesh if willing to curtail the intake which in the final analysis is the chief problem. It is not necessary to cut down on the variety of food taken provid-

ing any judgment is used in the selection of a variety, but it is necessary to cut down on the *quantity*, and that can be done with a minimum of discomfort and without injury if the cooperation of the patient is secured. The patient must want to reduce, and he must understand how to do it. It usually is wiser, the ultimate results being better, if weight is lost very gradually. A too rapid reduction may impair strength of heart or nervous system, the patient feels uncomfortable, loses confidence, and stops treatment. A reduction which requires more time results in establishing new food habits, so that afterwards the patient finds himself able to hold his new weight without conscious effort. A weight loss of two pounds per week is as much as should be sought, and one pound is quite enough after the first ten or twenty pounds have vanished. The point to be emphasized in this present craze for getting thin is the necessity of gradually *cutting down the quantity* of food consumed if discomfort and harm is to be avoided.

WE have been advised that a ruling has been made by the Indiana State Board of Nurses Examination and Registration requiring all hospitals to have as supervisors only graduates from a four-year high school, and we have been asked, "What effect will a ruling of this kind have on those nurses who now are supervisors but are not graduates of four-year high schools?" We have not received an opinion from the attorney for our Association but we feel safe in saying that a ruling such as mentioned cannot be made retroactive. Furthermore, if an attempt were made to make such a ruling retroactive it would work a very great injustice inasmuch as it would affect the standing of many surgical supervisors as well as several floor supervisors whose services have been established as efficient and highly satisfactory even though such supervisors may not possess credits for four years of high school work. As a matter of fact we can believe that some nurses and some supervisors of nurses who even though not high school graduates are a good deal more efficient and acceptable than others who are graduates of high schools. In attempts to stand erect some people topple over backwards, and if the nurses' board is attempting to make rigid rulings retroactive it is a question if the board will not come in for a whole lot of criticism and deserved opposition.

"Should Women Smoke" is the title of an editorial in the *Rhode Island Medical Journal* for November, and after logically considering the ill effects of tobacco upon the human economy and pointing out that women are more susceptible than men to these ill effects, the writer says, "Years ago someone said, 'Men do not die, they kill themselves' and we know that for all of our excesses there is an eventual accounting in which we may become bankrupt, but we always pay. Any agent, therefore, that detrimentally affects the balance of

health is a menace, and in a consideration of which the use of tobacco is undeniably upon the wrong side of the scale. * * * * * In the harvest of our excesses women are the first to reap the tares. And this isn't all; if the individual woman alone suffered it would be enough, but to pass along the graceless heritage of undernourishment, an anemic and puny constitution to her children, is certainly a penalty to which the offspring is not entitled." However, the editor winds up with a comment that in substance we have uttered many times when he says, "Sentimentally, it is singular that a habit with nothing to recommend it, is no expression of elegance, not over cleanly, is neither edifying nor cultural, should develop a trait in feminine desire so entirely remote from those graces and higher standards of esthetic niceties that we have always associated with our woman-kind, and it seems but yesterday when woman gloried in her refinement, dainty, desirable, and lovable, as yet with untainted breath and unstained fingers when she was occupying a higher plane in the affairs of real life than after she has fallen a victim to this bizarre habit which has only a degrading allurements with no offsetting merit." Then, as an afterclap, the editorial concludes with this suggestion, "But if she must smoke, if tobacco is so absolutely indispensable, why not 'reach' for the old brier and have a real smoke?"

ONE of our readers complains about bad treatment at the hands of an automobile insurance adjuster representing one of the small and not well known insurance companies. It is just as well to remember that most insurance companies have you defeated at the start in case they adhere to the technical protection that is made a part of their policies. We admit that it is necessary for companies to protect themselves against fraud, but in doing this they surround themselves with so many restrictions that any company incorporating such restrictions in their policies and desirous of getting the best of the bargain can make it almost impossible for the policy-holder to receive even common justice. Fortunately the old, well-known and well financed companies usually do not take advantage of unfair technicalities in the settlement of claims, and the policy-holder receives fair treatment. Even the claim adjuster for such companies loses his job if he effects any decidedly unfair discriminations in favor of the company, for the company well knows that in the long run fair treatment and decent liberality makes for success. However, it makes no difference what the agent may promise, it is the claim adjuster that settles matters when the policy-holder tries to collect on his policy, but if the agent is well-known and responsible his influence usually results in fair treatment irrespective of the attempt of the claim agent to discriminate unfairly in the interest of the company, for no company wilfully antagonizes a well-established agency, and, on the other

hand, the agency will not unfairly antagonize a policy-holder, for his success depends upon fair dealing to his client. The physician who really desires and needs protection in the way of any kind of insurance will be wise if he takes his policies with established agencies, and in companies that not only are well financed but have an established reputation for fair dealing. This comment should not be construed as indicating that all of the smaller and lesser known insurance companies are unworthy of patronage, but it is our experience and we have knowledge of many instances indicating dissatisfaction with so many of the smaller and less known companies operating in Indiana that we feel disposed to warn our readers and advise them that if they have in mind taking out policies in any of the smaller and less known companies, and particularly the mutual companies, they will be wise if a thorough investigation is made before giving patronage to that company.

IN all this agitation concerning the cost of medical care do not let any one forget the fact that medical care of the *indigent* poor is a community responsibility and the community should pay for it rather than expect charitably inclined doctors to do so. Furthermore, no one should be permitted to lose sight of the fact that the sick poor who can pay something for medical and surgical attention are or can be taken care of adequately by generous physicians, and it only remains to find some systematic method of bringing such attention to those who need it. It is the rankest kind of folly to class such people with the indigent and arrange to have their medical and surgical care donated to them, for that sort of a plan means an increase in dependency and pauperism, with its ultimate increase of taxation for the people. Lastly, the people should know that it is just as fair and consistent for medical men to be paid adequately for the professional services they render as it is for lawyers to be paid adequately for their services. The agitation on every hand concerning fixed fees for medical and surgical services, whether the services are rendered rich or poor, is irrational and inconsistent. The lawyer may charge a very rich man a thousand dollars for drawing a will requiring but a few words to dispose of a fortune to the nearest friends, but charges only fifty dollars for drawing a will for a man in moderate circumstances even though the will may comprise ten typewritten pages and requires considerable legal knowledge so that all the benefactions will be carried out in accordance with the testator's wishes. In the one case the fee was charged because the client was able to pay it and not because the preparation of the will required any great amount of legal acumen. In the other case the fee is consistent with the ability and skill employed in the preparation of the will, and is in keeping with the ability of the client

to pay for the service. The example might be carried further by saying that rarely if ever does an attorney do anything for which he is *not* paid and usually paid well. On the other hand, physicians render an enormous amount of skilled service for which they neither charge nor expect compensation, and even to the wealthy the fees are seldom if ever exorbitant and in the majority of instances are far less than they should be if the value of the services is considered. The truth of the matter is that there is a tendency at the present time to browbeat the physician into accepting small remuneration for very valuable service, to say nothing of trying to make him feel that he owes a good deal of his service to mankind without expectation of reward. It is time to answer such opinions with rational and consistent combative arguments.

SPEAKING of the lay abuses of the generosity and charity of the medical profession, the *Illinois Medical Journal* says that those of the medical profession who are men of wealth have gained their emoluments in other ways than direct income from patients. "Either by inheritance, investments in stocks, or real estate, or commercial ventures, and sometimes even by matrimonial affiliations, has come the acquisition of material goods to the average physician. As a matter of fact, physicians disburse more actual charity, dollar for dollar on a *pro rata* income basis, than does any other branch of American citizens. In *Fordham's Magazine*, under date of July 29, 1930, statistics drawn from the personal practice of 3,284 physicians showed that the average *gross* income in towns of 5,000 population to be \$4,800; in towns of 20,000 population, \$6,369; in cities of 50,000 population, \$7,022, and in metropolitan centers, \$7,125. This is a lamentable return when compared with the average salaries of teachers, commercial and industrial employees of importance, and of labor in other avenues of life. The figure of \$7,125 per annum for physicians in metropolitan centers is an average of slightly less than \$600 per month, or than \$150 per week. Scrutiny of payrolls of employees of municipalities, industries and commercial institutions would reveal that a salary of \$150 per week is considered picayunish for men and women of importance in these walks. In the learned professions it would quite often be sneezed at. And bear in mind that in none of those industries or professions is barefaced appeal made for free labor such as is everlastingly demanded from physicians for expert services. Yet these same classes of citizens are augmenting the movements to provide more and more free medical service, and more and greater usurpation of the province of medical practice by providing free or part-pay clinics for the middle classes, and by the extension of the scope of medical practice by universities, by hospitals, and by tax-supported institutions, or foundations. Contrast such activity with the complaint made recently by the Chicago Garage

Owners' Association against the parking of automobiles on the public streets after 1:00 a. m. The Chicago garage owners' union has been attempting to force the police commissioner to utilize his department to arrest all owners leaving their cars out on the city streets after 1:00 a. m. with the motive back of the movement the contention of the garage owners that they cannot continue in business and compete with the city as a free parking place. Removal of the cars from the tax-supported thoroughfares naturally would force them into the nearest garage. The best of it is that a certain amount of sympathy is being given the garage owners. Yet their complaint is not based on any different ground from that of the contention of the medical profession in its fight against lay usurpation and free distribution of the practices of medicine by tax-supported hospitals and endowed institutions. Yet in its fight the medical profession has never had the faintest degree of support from the garage owners' association, either as individuals or as an organized group. The garage men, like men in all other lines of life, are not going to socialize their own business, but they are willing to socialize medicine just for the sake of getting a little more medical charity."

The editorial continues by saying that the doctors of Illinois are contributing from twenty-seven to thirty-five million dollars per year to the care of the indigent, and critics maintain that these activities must not be classified as charity, but rather as the doctor's contribution to the welfare of his community. No other profession, business or trade, is either ready or willing to contribute thirty million dollars a year for charity sake. Contributions of free medical service to society means the same to a physician as any material contribution made by other individuals in another profession. And then the editor concludes with this wallop: "What shoe industry in Illinois gives away thirty thousand yearly in free shoes alone. let alone thirty million?"

DEATH NOTES

JOHN P. TOURNER, M.D., of Bloomington, died November 10th, aged 76 years.

NATHANIEL K. CORN, Pikeville, died November 8th, aged seventy-nine years. Dr. Corn graduated from the Louisville Medical College in 1887.

G. W. THOMPSON, M.D., of Stockwell, died November 1, aged sixty-two years. Dr. Thompson graduated from the Medical College of Indiana, Indianapolis, in 1897.

B. F. OVERMYER, M.D., of Leiter's Ford, died November 11th, aged seventy-four years. Dr.

Overmyer was a member of the Fulton County Medical Society, the Indiana State Medical Association and the American Medical Association.

JOHN E. ROBISON, M.D., of Frankfort, died November 14th, aged fifty-nine years. Dr. Robison was a member of the Clinton County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Medical College of Indiana, Indianapolis, in 1901.

GEORGE O. COSBY, M.D., of Elizabethtown, died in an Indianapolis Hospital, November 9th. Dr. Cosby was seventy-seven years of age. He was a member of the Bartholomew County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Medical College of Ohio, Cincinnati, in 1881.

ROBLEY D. BLOUNT, M.D., of Valparaiso, fell dead while playing golf, November 13th. Dr. Blount was sixty-two years of age. He was a member of the Porter County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from the Medical College of Indiana, Indianapolis, in 1889.

S. H. MALPAS, M.D., of Indianapolis, died at an Indianapolis Hospital, November 15th, aged sixty-two years. Dr. Malpas had practiced medicine in Indianapolis for thirty-five years. He was a member of the Indianapolis Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Kentucky School of Medicine, Louisville, in 1893.

C. L. SLONAKER, M.D., of Culver, died November 24, aged fifty-three years, death coming unexpectedly as the result of a kidney infection. Dr. Slonaker was surgeon for Culver Military Academy. He was a member of the Marshall County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. Dr. Slonaker graduated from the Medical College of Indiana, Indianapolis, in 1903.

NEWS NOTES AND PERSONALS

DR. PATRICK H. VEACH, of Staunton, was elected coroner for Clay county, November 4th.

DR. MYRON J. DRULEY, of Anderson, and Miss Lois Moss, of Anderson, were married November 26th.

MISS ROBERTA GARDNER, of Delphi, and Dr. Arthur V. Cole, of Hammond, were married October 15th.

THE Clay County Medical Society held its October meeting at the home of Dr. and Mrs. H. H. Ward, of Coalmont.

THE annual flower show and occupational exhibit of Longcliff, Logansport state hospital, was held November 11th and 12th.

MRS. WILLIAM PALM, wife of Dr. Palm of Harmony, spent the month of November in Los Angeles and San Diego, California.

DR. ARNOLD H. DUEMLING, of Fort Wayne, sailed from New York, November 19th, for a period of postgraduate study in foreign capitals.

THE Hamilton County Medical Society held a meeting at Sheridan, October 14th. Dr. Foster J. Hudson presented a paper on "Most Common Birth Injuries."

DR. E. M. VANBUSKIRK AND DR. A. J. SPARKS, both of Fort Wayne, presented papers before the Adams County Medical Society, at Decatur, November 14th.

DR. and MRS. L. W. ELSTON, of Fort Wayne, recently returned from Boston, where Dr. Elston took a postgraduate course on fractures at Harvard University.

DR. LUTHER S. HIRT and Mrs. Minnie Laverty, both of Brazil, were married September 28th, and spent the month of October visiting in Kansas and Colorado.

DR. W. D. GATCH, of Indianapolis, talked before 130 freshmen medical students at Bloomington, October 28th and pointed out the requirements of a good physician.

THE Decatur County Medical Society met at Greensburg, November 19th. Dr. Charles Overpeck presented a paper on "State Medicine" which was discussed generally.

DR. AMOS CARTER, superintendent of the state sanatorium at Rockville, has resigned his post. Dr. Carter has been superintendent since 1919, and plans to retire from active practice.

THE Laporte County Medical Society met at Michigan City, at the Spaulding Hotel, October 16th. Dr. M. H. Barker presented a paper on "Diagnosis and Treatment of Nephritis."

THE Laporte County Medical Society met in Laporte, November 20, with Dr. Harry M. Hedge, of Chicago, as the principal speaker, his subject being "Treatment of the Common Skin Diseases."

DR. E. T. THOMPSON, administrator of the Indiana University School of Medicine, has an-

nounced the appointment of Dr. W. A. Brumfield, Jr., as instructor in pathology and bacteriology.

DR. WILLIAM A. DOEPPERS, City Hospital superintendent, Indianapolis, addressed the Indianapolis Federation of Community Clubs, October 24th, his subject being "Hospitalization in Indianapolis."

THE Hamilton County Medical Society met at Arcadia, Indiana, November 11th. Dr. Robert M. Moore, of Indianapolis, presented a paper on "Internal Medicine," with special reference to rheumatic hearts.

THE Knox County Medical Society held its regular meeting at Vincennes, October 14th. "Diagnosis and Significance of Heart Sounds" was the title of a paper presented by Dr. George S. Bond, of Indianapolis.

DR. ALBERT E. BULSON, of Fort Wayne, and Mr. Thomas A. Hendricks, of Indianapolis, attended the meeting of secretaries and editors held at the office of the American Medical Association in Chicago recently.

DR. J. H. WILLIAMS, of Muncie, was appointed City Health Commissioner of Muncie, October 1st, to succeed Dr. H. D. Fair. Dr. Williams was president of the board until his recent appointment as health commissioner.

DR. U. V. PORTMAN, of the Cleveland Clinic, presented a paper before the Indianapolis Medical Society, November 25th. His subject was "The Role of Radiation Therapy in the Treatment of Benign Gynecologic Conditions."

THIRTY-NINE physicians were present at the meeting of the Northeastern Indiana Academy of Medicine, at the Gawthrop Hotel, Kendallville, October 30th. Dr. Stanley W. Gibson, of Chicago, presented a paper on "Infant Feeding."

DR. R. M. WILDER, of Chicago, presented a paper on "Glycosuria" before the Muncie Academy of Medicine at its meeting, November 11th. The paper was discussed by Drs. John S. McDonald and John H. Warvel, of Indianapolis.

LADIES night at the Terre Haute Academy of Medicine was held December 4th, at the Centenary M. E. Church. Dinner was served at the church, following which Dr. A. W. Adson, of the Mayo Clinic, talked on "Neurological Surgery."

THE Tippecanoe County Medical Society held a clinical meeting November 13th, at the St. Elizabeth Hospital. Dr. Robert B. Preble, of Chicago, addressed the members, his subject being "Generalizations Concerning Heart Diseases."

THE Wayne-Union County Medical Society held a meeting November 13, at the Richmond-Leland Hotel. Dr. White, of Cincinnati, read Dr. Harold F. Downing's paper on "Poliomyelitis." Sudden illness prevented Dr. Downing's presence.

DR. JOHN C. SHATTUCK, resident physician in the James Whitcomb Riley Hospital, has resigned to enter general medical practice at Brazil, where he will be associated with Dr. George W. Finley, specializing in diagnosis and pediatrics.

THE Terre Haute Academy of Medicine held its November meeting at the Elks Club, Terre Haute, November 7th. Following dinner, Dr. W. P. Eagleton, of Newark, New Jersey, presented a paper on "Surgical Treatment of Meningitis."

DR. R. B. PREBLE, of Chicago, presented a paper on "Generalizations in Heart Diseases" before the Tippecanoe County Medical Society, November 13th, at Lafayette. Physicians were present from White, Carroll, Montgomery and Fountain counties.

THE Sullivan County Medical Society and the Mary Sherman Hospital staff held a meeting at the hospital, at Sullivan, November 5th. At the close of the meeting the doctors went to the home of Dr. H. S. Leach where they were entertained by motion pictures and music.

THE Fifth District Medical Society met at the Vermilion county hospital, November 18th. Dr. Frank W. Cregor, of Indianapolis, was the principal speaker, his subject being "Legislation." Moving pictures pertaining to medical subjects were shown the sixty-two doctors present.

DR. JAMES F. MAURER, a graduate of the Indiana University School of Medicine, has completed an extensive service as interne in New York hospitals, majoring in surgery, and will locate for practice in his home city of Brazil, where he will practice general surgery.

DR. ALLEN B. KANAVAL, of Chicago, was elected president of the American College of Surgeons, at the twentieth annual clinical congress held in Philadelphia in October. Dr. R. Millar, of Ottawa, Canada, and Dr. E. J. Eliason, of Philadelphia, were made vice-presidents.

DR. A. S. BURDICK, who has been official editor-in-chief of *Clinical Medicine and Surgery* for a long time, has given up that title, and the managing editor, Dr. George B. Lake, becomes officially its editor. Dr. Burdick will retain the leading position on the general editorial staff.

FIFTY members of the North Central Section of the American Urological Association were luncheon guests of Dr. Franklin S. Crockett and Dr. Will Washburn, at the Hotel Fowler, Lafayette, October 25th. The visitors went from the annual session in Indianapolis to witness the Purdue-Wisconsin football game.

THE Thirteenth District Medical Society met in Mishawaka, November 5. Clinical sessions were held in the morning and a business session in the afternoon. Following a banquet in the evening, Dr. Louis J. Hirschman, of Detroit, Michigan, spoke on "The Principles Underlying the Treatments of Ano-Rectal Diseases."

DR. E. N. KIME, of Indianapolis, presented a paper before the Fort Wayne Medical Society, October 28th, his subject being "Common Skin Diseases." The talk was illustrated. Dr. Kime also talked before the Rush County Medical Society, November 10th, when his subject was "Medical and Surgical Diathermy."

THE third of a series of health talks was delivered at Butler University October 29th by Dr. Harold S. Hatch, whose subject was "Sleep in Relation to Keeping Well." Other lectures will be presented by Dr. John Warvel, Dr. M. H. Mothersill, Dr. James A. Green, of Indianapolis, and Dr. Edith Hale Swift, of New York.

THE Central State Hospital Program of the Indianapolis Medical Society was held Tuesday, November 18th. A symposium on "Five Years' Experience with the Malaria Treatment of Neurosyphilis" was presented, the speakers being Dr. Max A. Bahr, Dr. Francis Prenatt, Dr. A. M. De Armond, Dr. C. P. Clark and Dr. W. L. Bruetsch.

MEMBERS of the North Central Branch of the American Urological Association, at the three-day convention held in Indianapolis, October 23rd, 24th and 25th, chose Dr. H. M. Stang, of Eau Claire, Wisconsin, president. Dr. A. F. Weyerbacher, Indianapolis, was elected vice-president, and Dr. Frederick B. Foley, St. Paul, Minnesota, secretary.

THE annual meeting of the Indiana Academy of Ophthalmology and Otolaryngology was held in Indianapolis, December 10th, at the Indianapolis Athletic Club. The committee on arrangements made a change in the length of the meeting this year, limiting it to one day well filled with papers and case reports, followed by dinner in the evening.

APPROXIMATELY seventy-five members of the Vanderburgh County Medical Society and its auxiliary met at the Evansville Country Club November 18th for their regular monthly meeting.

Dr. R. G. Leland, director of the Bureau of Public Health Instruction of the American Medical Association, headed the program, his subject being "The Physician Practices Prevention."

THE Wayne-Union County Medical Society held a meeting at Richmond, at the Richmond-Leland Hotel, October 16th. Dr. Albert E. Sterne, of Indianapolis, presented a paper on "Head Injuries, With and Without Skull Fracture." The anatomy of the central nervous system was reviewed with the aid of lantern slides and several x-ray slides of skull fracture shown.

THE Miami County Medical Society is the permanent possessor of the silver loving cup awarded by the Eleventh Indiana Councilor District Medical Society, by virtue of winning the attendance trophy for three consecutive years. The cup will be placed in the doctors' room of the Dukes Memorial Hospital. The Eleventh District society will hold its next meeting in May, 1931.

DR. ALFRED S. JAEGER, of Indianapolis, was made president of the Seventh Indiana Councilor District Medical Society at the annual session held in Indianapolis October 28th. Dr. Walter L. Portteus, of Franklin, was elected vice-president and Dr. E. M. Pitkin, of Martinsville, secretary. Dr. Jaeger succeeds Dr. W. J. Sandy, of Martinsville. Dr. E. Starr Judd, of Rochester, Minnesota, was the principal speaker at a dinner at the Columbia Club.

A TOTAL of \$912,826 is asked for the next two years by the trustees of the Richmond state hospital. It is proposed to spend \$215,712.40 of this amount for new constructions and improvements. Among the requests contained in the budget is one for \$75,000 to complete the construction of a new 100-bed receiving ward; \$50,000 for additional land; \$50,000 for construction of second-floor additions to the diet kitchens, and \$7,000 for construction of a physician's residence.

THE Indiana University School of Medicine is employing moving pictures for preserving records for teaching and research purposes, of outstanding clinical cases in the University hospitals. The University is building up a film library in this way. A sixteen-millimeter camera is being used and pictures are being made at the rate of about 500 feet per month. Dr. W. D. Little is the faculty member in charge of this work. Photographic work is done by F. J. Moore and Charles Webb.

DR. M. A. AUSTIN, of Anderson, secretary of the Madison County Medical Society, arranged the November 18th meeting of the society in honor of the veteran physicians of the county. Experiences of men engaged in the practice of medicine

in the early days of Madison county were related by several doctors past seventy years of age. Dr. Thomas M. Jones produced and read an old record of minutes of the society showing that the organization was formed in 1862. Members of the woman's auxiliary of the society had a dinner and bridge party the same evening at the home of Mrs. H. W. Gante, Anderson.

ROTARY clubs of Indiana have pledged \$250,000 for the construction of a convalescents' unit at the Riley Memorial Hospital in Indianapolis. In an address before the Rotary club of Indianapolis, November 11th, Dr. E. T. Thompson, administrator of the Indiana University hospitals, said that such a construction will fill an insistent need. Approximately twenty thousand children have passed through the doors of the hospital since its completion in November, 1924. Virtually every bit of equipment necessary to modern treatment of crippled children is available except the convalescent ward. The convalescents' unit will include all the modern ideas of the leading children's hospitals throughout the United States and Canada. It will include a large court where children may play and will give a finishing touch to the work that now is being done at the hospital.

In addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Lederle Laboratories, Inc.:

Diphtheria Toxoid.

Maltine Company:

Maltine with Cod Liver Oil and Iron Iodide.

The following articles have been exempted and included with the List of Exempted Medicinal Articles (New and Nonofficial Remedies, 1930, p. 477):

E. R. Squibb & Sons:

Tablets Digitalis Leaves—Squibb 1 Cat Unit (approximately 1½ grains).

Tablets Digitalis—Squibb 1 Grain (10 minims U. S. P. tincture).

INDIANA UNIVERSITY NEWS NOTES

NINE members of the Indiana University School of Medicine faculty at Indianapolis are included in this year's *Who's Who*, a biographical dictionary of famous living Americans.

A NEW gift of journals, bulletins, and reports which are considered of especial value since these volumes complete broken files in the I. U. medical library, has been made to the institution by Dr. T. Victor Keane, of Indianapolis.

DR. W. A. BRUMFIELD, JR., graduate of the Virginia Institute of Technology and the medical school of the University of Virginia, has accepted

a position in the department of pathology and bacteriology in the Indiana University medical school, Indianapolis.

EIGHT members of the Indiana University School of Medicine faculty, including Dr. B. D. Myers, dean of the school of medicine at Bloomington, were on the program for the first seminar held recently in the I. U. school of medicine auditorium, Indianapolis.

FOUR sophomore pledges of the Indiana University School of Medicine have been initiated into Phi Beta Pi, national medical fraternity, as follows: Carl Harmon, Valparaiso; Myron M. Hipskind, Richmond; Lee F. Rose, Indianapolis, and A. J. Roser, Huntertown.

DR. CHARLES P. EMERSON, dean of the Indiana University School of Medicine, was one of the speakers on the program for the Indiana state conference of the Catholic Hospital Association of the United States and Canada, which was held November 5 and 6 at St. Catherine's Hospital, Indiana Harbor.

MOVING pictures are being employed by the Indiana University School of Medicine in preserving a record for teaching and research purposes of outstanding clinical cases in the Indiana University hospitals. The university is building up a film library in this way which is regarded of high value.

THE Indianapolis chapters of Phi Beta Pi, Phi Chi, and Theta Kappa Psi, professional medical fraternities at Indiana University School of Medicine, held a joint dance at Walnut Gardens, Indianapolis, as the opening event on the fall social calendar of the medical center. Approximately 200 couples were in attendance.

PROF. R. CLYDE WHITE, director of the Indiana University bureau of social research, has accepted an invitation to give a critical discussion December 30, at Cleveland, before the joint convention of the American Statistical Association and the American Sociological Society. Dr. White will discuss the subject, "A Statistico-Legal Study of Divorce."

THE Robert W. Long hospital, Indianapolis, has received the first shipment of white metal hospital chairs in a purchase of furniture supplies which will be used to replace old and worn out equipment in the I. U. medical and hospital center. E. S. Rowlands, assistant administrator, announced that replacements will be made as rapidly as possible.

THE Junior League of Indianapolis entertained seventy-five Riley Hospital crippled children at a Halloween party at the occupational

therapy work-shop of the Riley Hospital. The Junior League committee in charge included Mrs. J. O. Richey, Mrs. Louis Haerle, Miss Caroline Sweeney, Miss Mary Ellen McNamee, Mrs. Russell Ryan, and Miss Elizabeth Watson.

JOHN OLIPHANT, of Fort Branch, who has been appointed medical school editor of the *Arbutus*, Indiana University annual, announces that class pictures have been made, individual pictures are being taken, and arrangements are going forward for the early completion of the medical section of the book. Edward Sirlin, of East Chicago, is business manager of the *Arbutus* for the medical school.

THE Sigma Theta Tau honorary professional sorority for nurses has initiated seven new members, who are student nurses at the Indiana University Training School for Nurses, Indianapolis. The new members are T. D. Talbert, Kokomo; Anita Chomel, Connersville; Maxine Meyer, Freetown; Elsie F. Loher, Mentone; Helen Wright, Evansville; Jennie Hobbs, Gaston, and Florence Housefield, Whiteland.

New high service records for October were registered in the patient list of the Indiana University hospitals, according to the announcement of Dr. E. T. Thompson, administrator. The records show that the university's three state hospitals, the Riley, Coleman, and Long hospitals, had 2,133 different patients during the month as compared with 1,913 for October a year ago. Resident patients numbered 670 and outpatients 1,463.

Good judgment, courage, an iron constitution and personality as well as a fundamental knowledge of the sciences and a knowledge of diseases are the qualities required of the physician, Dr. W. D. Gatch, head of the Indiana University Department of Surgery, Indianapolis, explained to more than 130 members of the freshman medic class at Indiana University (Bloomington). The doctor deals with some of the most intimate issues of life and it is because of this fact that the doctor should lead a settled life in order to build up trust in his patients, Dr. Gatch said.

CLASS officers of the Indiana University School of Medicine have been elected as follows:

Seniors: President, Donald Reed, Culver; vice-president, Harold Hilty, East Chicago; secretary, Margaret Benjamin, Thiells, N. Y.; *Arbutus* business manager, Edward Sirlin, East Chicago.

Juniors: President, Edward Boldrey, Bloomington; vice-president, Horace Harrison, Chandler; secretary, Francis Fargher, LaPorte.

Sophomores: President, Everett Thomas, Leesburg; vice-president, Wayne Houser, Hammond; secretary, Edmund Van Buskirk, Fort Wayne.

DR. HERBERT F. CALL, who last June completed his internship in the Indiana University hospitals, after being graduated with the M.D. degree from Indiana University in 1928, has been appointed resident in pediatrics at the James Whitcomb Riley Hospital, Indianapolis. He takes the place of Dr. Louis Burns, who has resigned to accept a position as chief resident in the state psychiatric hospital at Conimicut, R. I. Dr. Call has been doing postgraduate work and has been observing cases since June in a number of the country's leading hospitals for children, including the Shriners' hospital for crippled children in St. Louis, the Children's Memorial Hospital in Chicago, and the Cook county and Municipal contagious hospitals in Chicago.

DR. JOHN C. SHATTUCK, resident physician in the James Whitcomb Riley Hospital, has resigned to enter the medical practice in Brazil. Dr. Shattuck served one year as an interne in the Indiana University hospitals and has been medical resident physician in pediatrics at the Riley hospital since June, 1930. As resident physician, Dr. Shattuck made special studies in the blood chemistry of kidney diseases, and the university trustees in October granted him the degree, M.D., *cum laude*, in recognition of this work. Dr. Shattuck has previously received two degrees from Indiana University, bachelor of science in 1927, and doctor of medicine in 1929. He received his early education in the Brazil high school where he was graduated in 1923. Dr. Shattuck has had under his care in the Riley Hospital approximately 100 resident cases at all times and from fifty to sixty out-patients.

SOCIETY PROCEEDINGS

INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

October 28, 1930.

Meeting called to order at 3 p. m.

Present: Wm. N. Wishard, M.D., chairman; J. H. Stygall, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held October 21 read and approved.

The release, "Sanity in Driving," read and approved for publication Saturday, November 8.

Radio release, Saturday, November 1, "Sanity in Driving."

Report on medical meeting:

Oct. 14—Knox County Medical Society, Vincennes, "Diagnosis of Heart Sounds."

Request for speaker:

Nov. 12—Kiwanis Club, Muncie. Speaker assigned.

Request received for list of pediatricians in the state. List compiled.

The following letter was received by the Bureau:

"I recently treated the widow of a physician. Her illness resulted in her death. Her husband had been dead for some twenty-five years and she is survived by two sons and a daughter. She owned some fairly valuable real estate.

"Should I make a charge for services against the family? I know that I should be somewhat governed

by the prevailing local custom but am asking what might be the custom there."

The Bureau instructed the secretary to answer along the following lines:

"The matter of charging for services rendered the patient in question seems to be governed by the personal relations between the physician and his clientele, local custom, and the physician's own judgment. The Bureau feels that in the abstract there would be no violation of ethics in making a charge under the circumstances mentioned."

Report received from the secretary of the Delaware-Blackford County Medical Society that the editor of the Muncie *Evening Press* desires to be placed upon the mailing list for the weekly releases of the Bureau.

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole November 4, 1930.

November 11, 1930

Meeting called to order at 3 p. m.

Present: Wm. N. Wishard, M.D., chairman; J. H. Stygall, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held October 28 read and approved.

The release, "A Word to Hunters," read and approved for publication Saturday, November 22.

Radio releases: November 8, "The Family Medicine Chest." November 15, "A Word to Hunters."

Requests for speakers:

November 12 — Kiwanis Club, Muncie. Speaker assigned.

November 20 — Exchange Club, Muncie. Speaker assigned.

The following letter was received from the executive secretary of the Marion County Tuberculosis Association:

"For a number of years the Indiana State Medical Association Bureau of Publicity has permitted us to use their time over the radio during our Christmas Seal Sale which is the month of December. If you still have a radio hour we would like permission to use it again this year.

"Our National office furnishes us with these talks written by prominent people and we will be glad to submit these to your committee for approval providing they see fit to grant us use of their time."

The Bureau approved the above request of the Marion County Tuberculosis Association, allowing them to use, under the same conditions as in former years, the radio time given to the Bureau of Publicity of the State Medical Association.

The following letter was received from a school nurse:

"Please advise us how far we may venture in advising school children to go directly to an oculist for the care of any eye defects.

"I am enclosing slips we use to report defects found and of course have had some criticism from the opticians and also one or two family physicians, who feel we should send all cases to them directly.

"Please give us your statement as to the ethics of this procedure that we may advise our school board, one of whom is a chiropractor's wife, and another who has sent his children to an optician."

The Bureau requested the secretary to present this letter to an ophthalmologist asking that he suggest if there is any class of cases which might be referred to an optician or an optometrist and by such action make it possible for a grave condition of the eye to be overlooked. A report of this interview was to be given to the Bureau at its next regular meeting at which time the Bureau will prepare an answer to this question. The secretary was instructed to acknowledge the receipt of this letter and say that the questions would be brought to the attention of the Bureau at the next regular meeting.

The following letter was received from American Physicians and Surgeons, The Midwest Company, Publishers, Minneapolis, Minnesota:

"An important department in our forthcoming medical directory, *American Physicians and Surgeons*, will be that devoted to health resorts of the better class in every state. We aim to make this of real assistance to those who use the book by listing only resorts to which doctors would refer patients for the treatment of various ailments or for recuperation.

"We have found it very difficult to obtain reliable information on the various resorts throughout the country, but we trust that you will be in a position to give us advice and assistance in preparing a final list for your state. Enclosed you will find a tentative list which we have prepared. As we wish to include only the most reliable and reputable resorts, we would greatly appreciate your advice as to the eligibility of those we have selected, together with any additions to the list you may wish to make.

"Any information you may give us will be held in the strictest confidence, and we shall be very grateful for your cooperation."

The secretary was instructed to answer this letter along the lines indicated by the Bureau of Publicity. This organization has been reported by the Bureau of Investigation of the American Medical Association to be reputable.

Letter received from secretary of a county medical society asking us to write the editor of a paper in this county requesting that it print the news items released by the Bureau of Publicity. The secretary was instructed to write such a letter saying that the releases were generally published by papers over the state, that they were not advertising as the name of no physician in private practice was ever mentioned, that the articles were educational in character and were written in an understandable way, and that the service was gratuitous.

Letter received from a county nurse asking that she be placed upon the mailing list to receive the publicity articles. She writes:

"We have only weekly papers in our county and we find they only occasionally publish your articles. Is it possible for me as county nurse to receive copies of your publicity articles that I may urge the papers to publish them? I feel I could talk more convincingly if I had the article each week."

The secretary was instructed to place this name upon the mailing list.

The following letter was received:

"I have been asked to prepare a paper on 'Modern Tendencies in Diet' and my husband has referred me to you. This paper is to be read before our local Women's Club. I would be happy if you will include some material on the vitamins."

The information was supplied as requested.

Additional letters received commenting upon the work of the Bureau of Publicity. This correspondence is filed with the letters upon which a report was made at the Fort Wayne meeting.

The following libraries were placed upon the mailing list to receive the weekly releases of the Bureau of Publicity:

Library, Surgeon General's Office, Washington, D. C.

Library, College of Physicians of Philadelphia.

Library, New York Academy of Medicine, New York City.

The Boston Medical Library.

Library, Medical Society of the County of Kings, Brooklyn, N. Y.

The John Crerar Library Medical Dept., Chicago, Ill.

Lane Medical Library, San Francisco, California.

Library, Medical and Chirurgical Faculty of Maryland, Baltimore.

Letter received from the Director of Public Relations of the Committee of the Cost of Medical Care enclosing a press release. The secretary was instructed to study this release and condense it into an article that might be suitable for publication in *THE JOURNAL*.

The secretary was instructed to prepare a questionnaire to go to the hospitals of the state. This questionnaire, along with the first draft of an accompanying letter, was

to be presented at the next meeting of the Bureau of Publicity.

It was suggested that it is about time for another vigorous release on periodic health examination.

The following bills were approved for payment:
Central Press Clipping Service.....\$ 5.00
Robert M. Moore, M.D.....5.00

\$10.00

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole November 18, 1930.

INDIANA STATE BOARD OF HEALTH
DIVISION OF COMMUNICABLE DISEASES
MORBIDITY REPORT, NOVEMBER, 1930

Every county in the state mailed morbidity reports either positive or negative to the Division, except Newton and Warrick. All health officers are required to report every week whether they have communicable diseases to report or not, stating the fact. There were 562 negative cards received during the month. The prevalence of most of the important communicable diseases, as indicated by the reports from the health officers of the state, are summarized below.

Scarlet fever was the most prevalent disease reported, 829 cases. Three hundred and thirty-six cases the previous month. This bears out the often repeated statement that as cold weather comes on scarlet fever will increase. It is a cold weather disease. There were 557 cases of the disease in November of last year. Seventy counties in the state reported cases. Indianapolis reported 165 cases.

Measles made a bid for prevalence. Three hundred and fifty cases against forty the preceding month. This is not measles time. It shows itself in late winter and early spring. Only fifty-eight cases in November of 1929. The disease is epidemic in Lafayette where 206 cases were reported.

Smallpox shows a marked increase over the previous month with 233 cases as against seventy-six cases. Here is a coincidence; when smallpox increases, chickenpox does likewise. Six hundred and eighty-four cases of chickenpox this month and 135 cases last month. Why? Is it an error in diagnosis, or does it just happen so? On inspection the picture of chickenpox and a light case of smallpox is quite similar, as every clinician knows.

Typhoid fever declined slightly, fifty-four cases. Sixty-two cases the previous month. This is in keeping with the incidence of the season. The estimated expectancy was fifty-two cases. Nineteen counties reported cases. The southern counties reported twenty-three cases and the northern counties twenty-one cases. Counties reporting the greatest number of cases were Jackson and Jay, eight cases each, and Marion five cases.

Diphtheria is on the increase. Two hundred and fifty cases during the month and 201 cases the preceding month. The November average for the last five years is 308 cases. The disease is all too prevalent in Indiana with the effort that is being made with the immunizing serums.

Tuberculosis. The reported incidence of the disease this month (234) is very gratifying. The standard for reporting the disease is two cases for one death. There were 2,428 cases reported last year and 2,331 deaths. There should have been 4,662 cases reported. The reporting of disease is a vital procedure.

Poliomyelitis shows a marked decline over the previous month, twenty-nine and fifty-five cases, respectively. The decline incidence is manifest throughout the country. Nine counties reported cases. Indianapolis, seven cases and Evansville, Hammond and Valparaiso, three cases each.

C. S. Meningitis. A three-case decline is noted. Thirteen cases during the month and sixteen cases last

month. Six cases the corresponding month the previous year. Nine counties reported cases. Indianapolis and Muncie reported five and two cases, respectively.

Encephalitis. Seventeen cases were reported from Harrison County. No doubt, there are many cases of this disease following influenza that are not reported.

Tularemia. Six cases were reported from Dearborn and Pike Counties, four and two cases, respectively. The disease has recently been declared reportable by the Indiana State Board of Health.

The name and number of diseases reported during the month not mentioned above are as follows: whooping cough, 104; influenza, 33; pneumonia, 11; trachoma, 2; leprosy, 1 case from East Chicago; septic sore throat, 1 and 1 case of glanders in man from Wayne county.

H. W. MCKANE, M.D.,
Collaborating Epidemiologist,
U. S. P. H. Service,
Indiana State Board of Health.

DIVISION OF COMMUNICABLE DISEASES
ANNUAL REPORT FOR THE FISCAL YEAR ENDING
SEPTEMBER 30, 1930

H. W. MCKANE, A.B., M.D., Director
LEO J. RAIL, State Investigator
EUNICE M. JACOBSON, Stenographer
HELEN E. ELDER, Stenographer.

The function of the Division is to maintain a system of collecting and recording morbidity statistics from the health officers and physicians of the state and to determine the incident and prevalence of communicable diseases.

Every health officer in the state is required to report communicable diseases that occur in his jurisdiction each week whether they have diseases to report or not, stating the fact. It is required that every practicing physician in the state report cases of tuberculosis that come under his care direct to the Indiana State Board of Health. This report is made on special franked post cards furnished by the United States Public Health Service distributed to the physicians by the health officer having jurisdiction. It is also required that every practicing physician in the state report forthwith in writing on blanks furnished by the Indiana State Board of Health the name, address, age, sex, color, marital state and occupation of every person coming under his examination or care having syphilis, gonorrhea or chancroid. These reports are confidential and shall not be inspected by any person other than the official custodian of such reports in the Indiana State Board of Health, or by court order.

The current prevalence of communicable diseases as indicated by the reports from the health officers and physicians of the state are shown below by name and number from the urban and rural population as follows: (urban includes cities of 2,500 and over, rural all under 2,500 population)

| DISEASES | TOTAL | URBAN | RURAL |
|------------------------|-------|-------|-------|
| Tuberculosis | 2,506 | 1,610 | 896 |
| Chickenpox | 3,434 | 2,949 | 485 |
| Measles | 3,158 | 2,106 | 1,052 |
| Scarlet fever | 5,962 | 3,141 | 2,821 |
| Smallpox | 6,131 | 3,104 | 3,027 |
| Typhoid fever | 305 | 142 | 163 |
| Whooping cough | 1,528 | 1,032 | 496 |
| Diphtheria | 1,167 | 696 | 471 |
| Influenza | 621 | 1 | 620 |
| Pneumonia | 269 | 76 | 193 |
| Mumps | 287 | 204 | 83 |
| Poliomyelitis | 87 | 56 | 31 |
| C. S. Meningitis | 476 | 375 | 101 |
| Trachoma | 5 | 0 | 5 |
| Undulant fever | 31 | 14 | 17 |
| Malaria | 6 | 6 | 0 |

| | | | |
|-----------------------------|----|---|---|
| Leprosy | 1 | 1 | 0 |
| Tularemia | 10 | 5 | 5 |
| Pallegria | 1 | 0 | 1 |
| Erysipelas | 2 | 2 | 0 |
| Ophthalmia Neonatorum | 2 | 2 | 0 |
| Septic Sore Throat | 1 | 0 | 1 |
| Hydrophobia | 2 | 0 | 2 |
| Impetigo Contagiosa | 1 | 0 | 1 |

Marked diseases are noted in the principal diseases over the previous year in measles, scarlet fever and influenza and an increase in smallpox, cerebro spinal meningitis and poliomyelitis.

Smallpox is the most prevalent disease reported during the year. Two thousand four hundred and twenty cases the preceding year. The estimated expectancy was 3,357 cases. The estimated expectancy is based on the experience of the last seven years, including epidemics. 6,131 cases, the number reported this year, is the greatest number of cases reported for the last twelve years. The nearest approach to this number was in 1918 when 5,582 cases were reported. Vaccination is the prophylaxis.

Measles shows the greatest decrease. There were 10,984 cases reported the preceding year. The average of the period is 11,888 cases, including the years 1926 and 1923 when 26,255 and 19,080 cases were reported, respectively. This is an off year for the disease. It is claimed by some that diseases go in cycles, if so, perhaps this year is the beginning of the measles cycle.

Scarlet fever shows a noticeable decline over the previous year when 6,921 cases were reported. The estimated expectancy was 5,496 cases. No appreciable effort is made for prophylaxis.

Diphtheria shows a substantial decline over the previous year when 1,495 cases were reported. The estimated expectancy over the period is 2,397 cases. This shows over a fifty per cent decrease for the disease.

Typhoid fever declined slightly. Three hundred and thirty-one cases were reported last year. The estimated expectancy was 658 cases. This is a fifty per cent decline for the period.

Influenza shows a marked decrease. 11,163 cases the preceding year. This is due to the epidemic in 1928 when 7,502 cases were reported in December of that year.

Tuberculosis made a slight increase. 2,428 cases were reported last year. There were 2,331 deaths from the disease last year. There is a determined effort to secure at least two cases reported for each death. It has been estimated that when one case of tuberculosis terminates fatally, there are nine active cases of the disease.

Poliomyelitis shows a marked increase. Thirty-four cases the preceding year. The estimated expectancy was fifty-nine cases, including the epidemic of 1928 when 124 cases were reported.

Cerebro spinal meningitis is epidemic in the state this year. Four hundred and seventy-six cases as shown above is the greatest number reported of record in Indiana. Two hundred and sixteen cases were reported from Indianapolis. Forty-eight cases the previous year. The estimated expectancy was thirty-four cases, exclusive of the present epidemic.

Undulant fever and tularemia are spoken of as the two new diseases show thirty-one and ten cases reported, respectively. Six and one cases the preceding year. There were thirty-five cases of undulant fever reported in 1928. The two diseases are becoming widespread over the nation and throughout the world. Many more cases occur, no doubt, but are not discovered.

Malaria and encephalitis are two diseases that have not been classified as reportable in Indiana. There have been nine cases of malaria reported the last two years. Six cases as shown above and three cases last year. These are the only cases reported during the estimated period. However, the disease seems to be asserting itself anew. No cases of encephalitis have been reported, but there have been a number of cases in different parts of the state, especially in New Albany, where there were the

latter part of this year epidemics of the disease with twenty-one deaths. Encephalitis may follow any of the infectious diseases or vaccination, but the principal cause is the organism of influenza, whatever that is.

AMERICAN UROLOGICAL ASSOCIATION

North Central Branch

The Seventh Annual meeting of the North Central Branch of the American Urological Association was held in Indianapolis October 23rd, 24th and 25th, 1930, at the Lincoln Hotel. The following papers were read and discussed:

An Interesting Case of Pseudohermaphroditism.—G. K. Wooll, M.D., Janesville, Wisconsin.

Preputial Stones.—F. S. Crockett, M.D., Lafayette, Indiana.

Ptosis Causing Acute Hydronephrosis in a Congenital Kidney.—G. H. Ewell, M.D., Madison, Wisconsin.

Lipoma of the Kidney.—M. A. Nicholson, M.D., Duluth, Minnesota.

Painless Urinary Calculi.—Edward H. Weld, M.D., Rockford, Illinois.

Pyelography with Campidol.—John W. Visher, M.D., Evansville, Indiana.

The Clinical Use of Uroselectan.—Edward Cathcart, M.D., Rochester, Minnesota.

Further Cinex Camera Studies on the Urinary Tract with the Utilization of Intravenous Urography.—Robert E. Cumming, M.D., Detroit, Michigan.

Urinary Tract Infections During Pregnancy.—Harold L. Morris, M.D., Detroit, Michigan.

A Discussion of Some of the Present Methods in Diagnosis and Treatment of Prostatic Hypertrophy.—Gilbert J. Thomas, M.D., Minneapolis, Minnesota.

Renal Function.—Chas. P. Emerson, A.B., M.D., Dean and Professor of Medicine, Indianapolis, Indiana.

Scientific Method in Relation to the Kidney Problem. A Review of Recent Literature.—B. B. Turner, B.S., Ph.D., Professor of Biochemistry and Pharmacy, Indianapolis, Indiana.

Bacteriophage—A New Agent in Treatment.—T. B. Rice, A.M., M.D., Associate Professor of Bacteriology and Public Health, Indianapolis, Indiana.

A Consideration of Sodium Iso-Amytal-Ethyl Barbiturate (Sodium Amytal).—L. G. Zervas, B.S., M.D., Assistant Professor of Medicine; Director of Lilly Research Laboratory at Indianapolis City Hospital.

A Chemical Drunkometer.—R. N. Harger, Ph.D., Associate Professor of Biochemistry and Toxicology, Indianapolis, Indiana.

Clinics at University Hospital by Indianapolis Members of Society.

Acute Specific Urethritis—Diagnosis and Treatment.—P. S. Pelouze, M.D., Philadelphia, Pennsylvania.

The Complications of Acute and Chronic Specific Urethritis, Non-Surgical, Diagnosis and Treatment.—Meredith F. Campbell, M.D., New York City.

The Surgical Treatment of the Complication of Acute and Chronic Specific Urethritis.—E. L. Keyes, M.D., New York City.

The Present Status of Biologic Therapy in Specific Urethritis.—Russell D. Herrold, M.D., Chicago, Illinois.

Intradermal Injections of Gonococcal Bouillon Filtrate.—B. C. Corbus, M.D., Chicago, Ill., and N. S. Ferry, M.D., Detroit, Mich., of Parke, Davis and Company. Discussion lead by L. F. Huffman, M.D., Cleveland, Ohio and N. S. Ferry, M.D., Detroit, Michigan.

Preventable Prostatic Deaths.—E. L. Keyes, M.D., New York City.

Clinics at Indianapolis City Hospital by Indianapolis Members of the Society.

Eighty-five urologists living in the North Central Section, which comprises the states of North and South Dakota, Minnesota, Wisconsin, Michigan, Ohio, Indiana, Illinois and Iowa, attended the meeting.

The following officers were elected: President, Dr. H. M. Stang, Eau Claire, Wisconsin; Vice-President, Dr. A. F. Weyerbacher, Indianapolis; Secretary-Treasurer, Dr. Frederick E. C. Foley, St. Paul, Minn.

The Society voted to meet next year at St. Paul, Minnesota.

H. G. HAMER,
Chairman,
Committee on Arrangements.

ST. JOSEPH COUNTY MEDICAL SOCIETY

The St. Joseph County Medical Society met in the Public Library Tuesday, October 28, 1930, Doctor Geisler, the president, in the chair.

The paper of the evening was by Dr. Edgar H. Myers on "Some Clinical Problems;—Penetrating Ulcer, Two Uroselectan Cases, Destructive Lesion of the Spine, and Others," Radiographically illustrated.

Doctor Myers showed radiographs illustrating a number of different cases but stressed mostly the untoward results of catheterization of old men suffering from hypertrophy of the prostate. He urged that emergency catheterization always be done in a hospital where every precaution against infection can be taken. He spoke of the new German drug "Uroselectan", giving its properties and urging its use as a diagnostic agent in connection with the radiograph in place of the cystoscopic examination. Three cases suitable for such examination were mentioned.

The Thirteenth District Medical Society, of which the St. Joseph County Medical Society is a part, met Wednesday, November 5, 1930, at Mishawaka.

The program consisted of general clinics held in the morning at St. Joseph Hospital under the charge of the Hospital Staff, followed by luncheon furnished by the Sisters of St. Joseph Hospital.

The afternoon session was held at the K. of C. Hall. The program consisted:

1. Treatment of Cancer of Cervix by Radiation. Dr. F. W. Martin, Michigan City. Discussion: Dr. Stanley A. Clark, South Bend. Dr. H. H. Martin, LaPorte.
2. Diagnostic Consideration of Genital Lesions. Dr. A. S. Giordano, South Bend. Discussion: Dr. S. T. Miller, Elkhart. Dr. Erwin Blackburn, South Bend.
3. The Third Trimester. Dr. J. A. Work, Elkhart. Discussion: Dr. David A. Bickel, South Bend. Dr. A. C. Yoder, Goshen.
4. Diagnosis and Management of Prostatic Hypertrophy. Dr. P. C. Traver, South Bend. Discussion: Dr. L. A. Wilson, Michigan City. Dr. C. C. Hyde, South Bend.

The evening session consisted of a banquet in the Dining Hall of the First Methodist Church, followed by an address—"The Principles Underlying the Treatment of Ano-Rectal Diseases." Dr. Louis J. Hirschman, Detroit, Vice-President American Medical Association, Professor of Proctology, Detroit College of Medicine and Surgery.

The regular meeting of the St. Joseph County Medical Society was held November 11, 1930, at the Public Library with Doctor Geisler, president, in the chair.

The paper of the evening was given by Dr. Paul Haley on "Digital Examination of the Rectum as an Aid to Diagnosis." The following is an abstract of Doctor Haley's paper:

"This subject is presented, not as something new or original on the part of the author, but rather to emphasize the importance of this simple procedure in routine examination where it is often omitted, and to call to mind some of the indications for its use. There is no field of medicine which could not profit by its use and no rank in file of the profession exempt from criticism for its neglect.

"Technic of making a digital rectal examination is all important. The ideal position of the patient may be summed in a few words by saying 'that position in which the patient, as well as the examiner, is relaxed and comfortable'. The lateral, or Simms position, with the examiner standing back of the patient, best accomplishes this. The direction taken by the examining finger is governed by the anatomy of the parts. The anal canal takes anterior and upward direction for from three quarters of an inch to an inch and a half, and meets almost at right angles the rectal canal, which takes an upward and posterior direction. The finger should explore all surfaces in its reach for elevations, depressions, indurations, etc., and at the same time take into account the tone of the sphincters. The exact location of painful lesions is best determined as the finger is withdrawn because the majority of these lesions occur in the anal canal and there is a tendency to carry them up further into the rectum, as the finger is introduced, and thereby draw an erroneous conclusion.

"In cases where the parts are too sensitive or where the sphincter is too tense to allow a good examination, a local anesthetic should be used.

"Bimanual rectoabdominal palpation is of great value in the diagnosis of tumor masses, and in women much can be learned by vaginorectal examination.

"It is important to take sufficient time as only haphazard conclusions can be drawn from a hasty exploration.

"The normal rectum has a soft velvety elastic feel, and any departure from this is quickly detected by the well trained examining finger, which becomes well educated only after having explored a large number of normal rectums. Thus another reason for making this examination routinely. The same applies to determining the tone of the sphincters, which is an important diagnostic aid. Increased tone usually means stricture, spasm, or some painful local lesion, while decreased tone may mean congenital defect, injury to the sphincters, or beginning degeneration of the spinal cord. This is one of the earliest signs to appear in *tabes dorsalis*.

"To enumerate some of the cases where rectal examination is indicated but likely to be omitted:

"In the pre-partum diagnosis of pregnancy, vaginal examination can in the majority of cases be entirely supplanted by rectal examination which reveals adequate information and reduces the possibility of infection.

"The new-born baby's rectum should at least be inspected routinely.

"Constipation has often a purely mechanical origin and such conditions as stricture, hypertrophied rectal valves, enlarged prostate or uterus can easily be reached by digital exploration.

"Persistent diarrhea is often the forerunner of malignancy, which should be sought for.

"Alterations in the shape of the stools should call for rectal examination.

"Sacral backache especially in the male is a positive indication for a check up on the prostate.

"Shooting pains down the limbs as in sciatica can often be traced to conditions in the rectum, and the same is true of urinary disturbances.

"Menstrual difficulties where the uterus and adnexa are found to be normal call for exploration of the rectum.

"In the diagnosis of appendicitis, digital examination of rectum should never be omitted as it is often the deciding factor.

"Where ectopic pregnancy is suspected, vaginorectal examination often will clinch the diagnosis.

"In post-operative or bed ridden patients, in whom abdominal distention and constipation are disturbing factors, digital examination will often reveal a fecal impaction.

"Then there is the large group of vague general disturbances which point toward a focus of infection. In these cases we should rule out the rectum and prostate before advising extraction of teeth and tonsils.

"Bleeding and pain are the two most constant symptoms which call direct attention to the rectum and digital examination is not likely to be omitted when that is the case, but even here we are prone to neglect it especially in children, where an early recognition of a condition like intussusception is of priceless value. In either of these conditions a carefully taken history as to the type, character and time of these symptoms permit of a much more intelligent examination.

"In closing may it be said that it is not necessary to be a proctologist in order to make a good rectal examination, but it is necessary to educate the examining finger by a large number of routine rectal examinations, which will at the same time benefit our patients by the early recognition of the occasional symptomatic pathologic rectum."

Dr. E. E. Linn, by transfer, and Dr. Morris Balla were elected to membership.

The Forty-fifth Annual Meeting of the St. Joseph County Medical Society was held in South Bend Wednesday, November 9, 1930. The morning session, at the Children's Dispensary, consisted of presentation of Clinical Cases by members of the St. Joseph County Medical Society, as follows:

J. A. Abel, M.D.—Toxic Encephalitis.

J. V. Cassady, M.D.—Bronchiectasis with Associated Sinus Infection.

S. A. Clark, M.D.—An X-Ray Exhibit.

St. C. Darden, M.D., and A. S. Giordano, M.D.—Monilia Infection of the Lung.

L. L. Frank, M.D.—Infantilism.

J. Gordon, M.D.—Heart Cases. Electrocardiograms.

G. F. Green, M.D.—Osteomyelitis Following Scurvy.

D. Grillo, M.D.—Head Rolling with Nystagmus.

K. T. Knod, M. D.—Empyema, Treated by Repeated Aspirations.

M. B. Lyon, M.D.—Hereditary Eye Defects.

J. E. McMeel, M.D.—A Surgical Abdomen.

M. K. Miller, M.D.—Premature Synostosis of the Cranial Bones.

R. W. Spenner, M.D.—Eventration of the Diaphragm.

10:30 A. M., Orthopedic Clinic by Melvin Henderson, M.D.

12 M., Luncheon at the Dispensary.

Afternoon Session at Oliver Hotel. 2:00 P. M., Roy Bishop Canfield, M.D., Professor of Otolaryngology, University of Michigan, Ann Arbor. "Symptom Complexes Indicating Intracranial Disease of Otic Origin." Harry Ward Plagemeyer, M.D., Associate Professor of Urology, Detroit College of Medicine and Surgery and Lecturer in Urology, Graduate School, University of Michigan, Detroit. "The Hypertrophied Prostate as Part of a Constitutional Disease." John Warton Harris, M.D., Professor of Obstetrics and Gynecology, University of Wisconsin, Madison. "Puerperal Infections," Russell Landram Haden, M.D., Chief of the Department of Internal Medicine, Cleveland Clinic, Cleveland. "Dental Infections."

Evening Session. 8:00 P. M. Leonard George Rowntree, M.D., Director of Department of Medicine, the Mayo Clinic and Professor of Medicine, Graduate School, University of Minnesota, Rochester, Minn. "Some Recent Studies in Arthritis."

MARTHA BREWER LYON, M.D.,
Assistant Sec. and Treas.

ALLEN COUNTY MEDICAL SOCIETY

The Fort Wayne Medical Society held its regular meeting at the Wayne Pharmacal Building at 8:15 p. m., October 7th, 1930.

Due to the fact that one of the cases on the program was present and wished to get away the general order of procedure was made irregular. However, when the

minutes of the previous meeting were read they were accepted by proper motion and vote from the floor.

Dr. J. L. Wyatt reported on three cases of Osteomyelitis:

First Case: Male, now 17 years of age was presented as having had an acute osteomyelitis of one tibia four years ago. At the time necrotic area was opened. Five days after onset the x-ray was negative. Following the first lesion numerous other lesions of the other long bones appeared, all of them being pure cultures of staphylococcus. The usual surgical and medical measures has been used on all of these lesions and the most persistent one has been the clavical. All lesions have been completely healed for the past three months and the boy is at work.

Second Case: Male 7 years of age. Had an acute osteomyelitis, of one wing of the ileum. The devastation in this case was so great as to involve and practically absorb the acetabulum. This case still has a discharging sinus at times.

Third Case: Male 26 years of age. Eight weeks ago he had a carbuncle on the elbow followed by pain in the right heel. Free pus was found in the medullary cortex of the os calcis and later the tarsal bones have been involved and in all probability amputation will have to be done.

The paper was discussed by Drs. Catlett and Rawles. In the discussions it was pointed out that an acute osteomyelitis does not show by x-ray during the first five days.

The second paper of the evening was given by Dr. E. M. VanBuskirk. The speaker presented the technique of localization of foreign bodies in the orbit by use of Sweet's localizer. The paper was highly technical but of special interest to everybody by virtue of its accuracy. Charts and films of some fifteen cases were presented.

This paper was discussed by Drs. S. H. Havice, E. L. Bulson, and B. P. Weaver. The extreme importance of x-raying all orbits for suspected foreign bodies was stressed.

Dr. Schafer made a brief report to the effect that the Medical Society as a group was giving to the Community Chest clients no less than \$20,000 in actual service a year. He asked to be instructed concerning what the society wished to be done in the way of establishing a Dispensary Clinic in connection with the Community Chest Agencies.

Dr. Cartwright made a motion which was seconded by Dr. Rawles that Dr. Schafer's Committee be instructed to collaborate with the Community Chest and be empowered to establish a clinic at some place mutually agreeable. After considerable discussion by various members, Dr. J. L. Wyatt moved that this motion be amended to read "For a period of one year"; the amendment was seconded. After some more discussion Dr. Weaver moved that the motion be tabled. This motion was carried by a vote of 15 for and 5 against.

Whereupon, Dr. Schafer who had already insisted that he and his committee wanted to take some action with the Community Chest on the following morning, presented his resignation which was not accepted. Then there was more discussion, lengthy motions which the secretary could not get down and most everybody wanted to talk.

Dr. Dancer moved that Dr. Schafer's committee be given full power to act as they see fit and report back to the society. Motion was seconded and passed.

In due order a motion to adjourn was made, seconded and passed.

The Fort Wayne Medical Society held its regular meeting at the Methodist Hospital October 14th, 1930, at 8:15 p. m.

In the absence of the president and vice-president, Dr. Steele, superintendent of the hospital, presided. The regular order of business was suspended and the program presented immediately.

Dr. Budd VanSweringen reported four cases as follows:

First Case: Male 72, with impacted extra-capsular

fracture of the neck of the right femur with a fracture and avulsion of the lesser trochanter on the same side. Treatment with moderate traction by the Thomas splint.

Second Case: Male, middle age, one year ago had an oblique fracture of one humerus with compound fracture of the bones of the forearm on the same side, open operation being necessary for both fractures. After removals of the splints a complete wrist drop was in evidence. At the present time the patient is just beginning to show some ability to contract the muscles of the forearm and hand following this wrist drop.

Third Case: Female, elderly, one year ago had fracture of the right patella and femur and also a fracture of the left patella and femur. On the left side there was a foot drop which is now showing some improvement.

Fourth Case: Male, aged 58, although apparent age was considerably more, became unconscious in the train and was taken to the hospital. History revealed that two years ago he had experienced some numbness in the arm and hand and three weeks ago after having some work done on his teeth, which were in very bad shape, he had a reaction to novocaine. Examination on admission to the hospital showed bad sclerotic condition in the arteries with evidences of cerebral sclerosis, a paralysis of the left side of the face and body. He had a one plus Kohlmer and a two plus Kahn test. The discussion of this case was finished by Dr. Edlavitch who believed that this man had cerebral hemorrhage, probably in the internal capsule.

This group of cases was discussed by Drs. Rawles, Somers and Harshman.

Dr. Doster Buckner presented a case of a male, 12 years of age, who had been suffering from malaise and about one week ago had some ill-defined intestinal cramps then had epistaxis and severe headaches. On admission to the hospital his temperature went up to 106 on different occasions with the pulse not more than 140. There was some dullness in the right lung at the base, coughing and some blood tinges in the sputum. The white blood count was 12,000. The Widal was positive. The speaker bent toward the diagnosis of a pneumonia and a pseudo-positive Widal. The discussants, Drs. Johnston and Worley, felt that this was a mild case of typhoid fever.

Following the program the 31 members and 4 guests retired to the cafeteria for repast.

The Fort Wayne Medical Society held its regular meeting at the Wayne Pharmacal Building, Tuesday evening, October 21st, 1930, at 8:15 p. m.

The minutes of the two previous meetings were read and approved.

Dr. Truelove reported a patient who died from a gangrenous appendix and general peritonitis. Some 24 to 36 hours prior to death the white blood count showed a rapidly decreasing total as well as a decreasing percentage of polymorphs, examinations being made at 3 or 4 hour intervals. Dr. Truelove presented this case as a query and Dr. Rhamy indicated that there evidently was a so-called paralysis of the leucocyte forming bodies.

The president made a very important announcement that he would limit the leading discussants of papers to 10 minutes each and the discussants from the floor to 5 minutes each. The assembly very graciously consented to this procedure and from the expressions on their faces it would appear that their indorsement was 100 per cent.

Dr. Lyman T. Rawles presented the paper of the evening on "Painful Feet." He divided feet into three classes: First those with the high arch; secondly, the normal foot; and thirdly, the flat foot. A full review of the anatomy of the foot was presented, slides being used.

The causes of painful feet are (1) improper shoes, (2) diminution of muscle support, (3) excessive weight, and (4) over use of the feet.

There was a discussion of local pains as well as distal pains and the occurrence of symptoms with reference to muscle cramps. Most of the discussion of the symptoms

as well as the treatment were considered along the lines of static errors in the feet.

The principles of treatment given by the essayist were: First, complete rest at the outset; second, massage and correction of deformities; third, exercises; fourth, felt pads in the shoes, proper heels, bars on soles of the shoes, etc., as indicated by the diagnosis. The essayist insisted that there is no one form of shoe or any particular make that is especially adapted to the treatment of all painful feet. The type of shoe prescribed must be done individually.

During the course of the essay the examiner presented many plaster casts (positive and negative) showing different types of static errors in the feet.

The discussion was opened by Dr. B. P. Weaver. Dr. Weaver considered Whitman's idea about the impaired elasticity of the ligaments. Attention was called to the need of cooperative education and re-education of the use of the feet. Dr. Weaver also described Ochsner's method of strapping which he has used for many years.

The next discussant was Dr. Somers who felt that the painful feet were due more to decreasing muscle tone than to impairment of the ligaments. He also called attention to the importance of strapping the feet of a person who has been bed-ridden for a long period of time before said person begins to walk.

The paper was further discussed by Drs. Zehr and Worley.

At this meeting Dr. Schafer reported that his committee was about ready to open a Dispensary Clinic in Room 619 Wayne Pharmacal Building. He called attention to several problems arising and his committee was asked to go ahead and formulate plans for meeting these problems and report back to the Society.

Thirty-one members and six guests were present.

The Fort Wayne Medical Society held its regular meeting October 28th, 1930, at 6:30 p. m. This was a dinner meeting held at the Shrine club rooms.

The regular order of business was dispensed with and a vote was taken on the application of Dr. D. C. Somers who was admitted to membership by unanimous vote.

Dr. E. N. Kime from the Department of Physical Therapeutics at Indiana University presented a paper on "Dermatology from the Standpoint of the General Practitioner." He presented a list of the common skin diseases which were classified into three groups: (1) those with systemic manifestations; (2) those with local manifestations of an infectious nature, and (3) the heterogeneous assortment of neoplasms.

The principles of treatment from the standpoint of physical therapy were stressed as to applicability, limitations and improper usage. A summary of the essay includes:

"1. The common skin lesions are readily amenable to diagnosis; treatment by drugs, medicaments and the simpler physical agents in the hands of the general physician may be readily and efficiently applied in his office.

"2. Approximately three-fourths of all skin lesions are included in the following list: Eczema, lues, acne, scabies, seborrhoea, impetigo, urticaria, dermatitis, veneata, tinea, alopecia, pediculosis, pruritis, and verruca. Pyogenic infections, furuncle, carbuncle, erysipelas, and subcutaneous cellulitis. Infected wounds, sinus tracts and fistulae. Infectious granulomata. Toxic, metabolic and infectious exanthemata. Tumors and cysts—sebaceous cysts, sebaceous adenoma, senile keritosis, cornu cutaneum, and clavus. Leukoplakia, papilloma, epithelioma, carcinoma and sarcoma. Vascular and pigmented nevus, caruncle, angioma, cervical erosions, melanoma and other premalignant lesions.

"3. In almost every one of the above list, in addition to the indicated drug therapy, the following agencies will be found of value either alone or in proper combination:

"Ultraviolet radiation, utilized either for its local, bactericidal parasitocidal or desquamative effect, or for

its general stimulative antiallergic proclivities.

"Electrothermic surgery, either by dessication, coagulation or electrothermic excision.

"4. A small series of slightly over a hundred recent electrosurgical operations performed in the office under local anesthetic is given to show the field of practical availability by these methods at this time."

Following the discussion which was given by Drs. Duemling, Buckner, Hall, Bower, Zehr and Worley, the essayist demonstrated the use of the electrosurgical scalpel and removed two small moles from the face of one of the guests.

A letter from the Business and Professional Woman's Club was read before the Society inviting our members to hear Dr. Bertha Van Hoosen of Chicago, editor of the *Medical Women's Journal* who will speak at the Chamber of Commerce November 3rd, 1930, at 8 p. m.

Fifty-two members and seven guests present.

L. P. HARSHMAN, M.D.,
Secretary.

MADISON COUNTY MEDICAL SOCIETY

Tales of riding horseback for miles over rough roads to attend the sick, blood letting and the use of rough surgical instruments in the early days of the medical profession in Madison county were recounted by eleven county physicians past seventy years of age at the November meeting of the Madison County Medical Society held in the Grand Hotel at Anderson.

Dr. M. A. Austin, secretary of the Society, presided. Excerpts from old records were read. The names of the members of the Society were read up to and including the year 1864, when the present records were started.

A fee bill included in the records aroused memories in many of the older physicians and caused smiles on the faces of the younger men.

The physicians who talked briefly of their experiences were Dr. O. W. Brownbeck, of Pendleton; Dr. L. E. Alexander, of Pendleton; Dr. John E. Canady, of Anderson; Dr. A. H. Sears, of Anderson; Dr. C. B. Schurtz, of Alexandria; Dr. H. C. Rogers, of Rockville; Dr. W. H. Lewis, of Pendleton; Dr. C. B. Pendleton, of Markleville; Dr. F. F. Mendenhall, of Elwood, and Dr. J. A. Hall, of Alexandria.

Dr. T. M. Jones, of Anderson, presented a treasure of great value to the physicians of Madison county in the form of the original records of the old Madison County Medical Society. The records, yellowed with age and brittle to the touch, for many years were in the possession of Dr. Jones' father. On a letter written in the fly-leaf is told of the rescue of the records of the early meetings of the society from a trash heap where they were thrown as useless by some preceding secretary. Dr. Jonas Stewart, whose death occurred a few years ago, found the records in 1897 and finally they came into the possession of Dr. Jones, and are now back in the possession of the society. The records comprise the minutes of the meetings of the county society from November 1, 1862, until April 30, 1883, making the records of the Madison County Medical Society complete from the beginning of the Society to the present time.

Among the minutes is the report of the meeting of December 27, 1865, when the first efforts were made to form the Indiana State Medical Association. The minutes of this meeting are reprinted herewith:

December 27, 1865.

The Madison County Medical Society met at the Odd Fellows Hall at 3 P. M. Dr. Wickersham was called to the chair in the absence of the president and vice-president. On motion Dr. Edmunds was made a member of the Society. Dr. Lomax of the Grant County Medical Society submitted the following resolution for the adoption of the Madison County Society:

"Resolved that for the purpose of securing a thorough organization of the profession in the state, we will unite with any other County Medical Association in the

organization of a representative State Medical Society, to be composed of delegates from the several county societies and that this society will be auxiliary to and under control of such State Medical Society."

On motion the president was authorized to appoint a committee of three to solicit and work for the advancement of the above resolution. Committee named were Drs. Morgan, Chittenden and Menefee.

On motion Drs. Lomax and Bigelow of Marion were made honorary members of this Society.

On motion the Society adjourned.

W. H. Menefee, Secretary; N. L. Wickersham, President Pro Tem.

M. A. AUSTIN, M.D.
Secretary.

BOOK REVIEWS

Books received since November 1, 1930:

TEXTBOOK OF PRACTICAL THERAPEUTICS. By Hobart Amory Hare, B.Sc., M.D., LL.D., Professor of Therapeutics, Materia Medica and Diagnosis in the Jefferson Medical College of Philadelphia, etc. Twenty-first edition, enlarged, thoroughly revised and largely rewritten. Illustrated with 145 engravings and six plates. 1104 pages. Cloth. Price \$7.50. Lea and Febiger, Philadelphia, 1930.

TEXTBOOK OF GYNECOLOGY. By Arthur H. Curtis, M.D., Professor and head of the Department of Obstetrics and Gynecology, Northwestern University Medical School. 380 pages with 222 original illustrations. Cloth. Price \$5.00. W. B. Saunders Company, Philadelphia and London, 1930.

TEXTBOOK OF MEDICINE. Edited by Russell L. Cecil, A.B., M.D., Sc.D., Assistant Professor of Clinical Medicine in Cornell University; assistant visiting physician in Bellevue Hospital, New York City; and Associate editor for Diseases of the Nervous System, Foster Kennedy, M.D., F.R.S.E., Professor of Neurology in Cornell University; head of the Neurological Department, Bellevue Hospital. Second edition, revised and entirely reset. 1592 pages. Cloth. Price \$9.00. W. B. Saunders Company, Philadelphia, 1930.

LEGAL MEDICINE AND TOXICOLOGY. By Ralph W. Webster, M.D., Ph.D., late clinical professor of Medicine (Medical Jurisprudence) in Rush Medical College, University of Chicago. 862 pages, illustrated. Cloth. Price \$8.50. W. B. Saunders Company, Philadelphia and London, 1930.

SURGICAL CLINICS OF NORTH AMERICA (Pacific Coast Number). Issued serially, one number every other month. Volume 10, number 5. October 1930. 271 pages with 136 illustrations. Per clinical year (February 1930 to December 1930) paper, \$12.00; cloth, \$16.00. W. B. Saunders Company, Philadelphia and London, 1930.

TREATMENT OF CHILDREN'S DISEASES with special formulas and drugs for childhood, and a short diagnostic summary of each clinical picture. By Prof. Dr. F. Lust, director of the Children's Hospital, Karlsruhe. Authorized translation of the sixth German edition with additions by Sandor A. Levinsohn, M.D., associate pediatrician to the Barnert Hospital, Paterson, N. J. 513 pages. Cloth. Price \$8.00. J. B. Lippincott Company, Philadelphia and London, 1930.

THE MEDICAL RECORD VISITING LIST OF PHYSICIANS' DIARY for 1931. Revised. Flexible binding. Price \$2.00. William Wood and Company, New York, 1930.

ILLUSTRATED PRIMER ON FRACTURES. Prepared by the Cooperative Committee on Fractures, under the auspices of the Section on Surgery, the Section on Orthopedic Surgery, in connection with the Department of

Scientific Exhibit of the American Medical Association. Cloth. 55 pages. Price \$1.00. The American Medical Association, Chicago, 1930.

DISEASES OF THE EAR. By Philip D. Kerrison, M.D., Consulting aural surgeon to the Manhattan Eye, Ear and Throat Hospital and to the Willard Parker Hospital for Infectious Diseases, etc. 627 pages, with 4,332 illustrations in the text, and 2 full pages in color. Fourth edition, revised and enlarged. Cloth. Price \$7.50. J. B. Lippincott Company, Philadelphia and London, 1930.

Book Reviews:

PERNICIOUS ANAEMIA. By Leybourne Stanley Patrick Davidson, B.A., M.D., F.R.C.P.E., and George Lovell Gulland, C.M.G., LL.D., M.D., F.R.C.P.E., with appendix on dietetic treatment by Ruth Pybus, sister dietitian, Royal Infirmary, Edinburgh. Introduction by L. D. Thompson, M.D., assistant Professor of Clinical Medicine, Washington University School of Medicine. 293 pages, with 8 illustrations and 22 plates, 12 in colors. Cloth. Price \$8.50. The C. V. Mosby Company, St. Louis, 1930.

The subject of pernicious anemia has been most comprehensively reviewed by Doctor L. S. P. Davidson and Doctor G. L. Gulland in this book.

A widespread interest in this disease has been manifested by both the medical profession and the laity since the time of its recognition by Doctor J. S. Combe in 1822. Although more than a century has elapsed, the etiology of this disease still remains in obscurity. The laity has been interested because of the invariably fatal termination of the disease.

The authors have laid a good historical background for their subject, and have discussed the various concepts held in the past relative to the etiology of pernicious anemia. In addition, they have reviewed the more recent advances in our knowledge, and have attempted to fit together most of the divergent views.

They are of the opinion that it is essential to accept the constitutional factor as existing in patients suffering from pernicious anemia. This inherent weakness may appear in any system, but may vary in degree in the different systems (in the stomach, liver, bone-marrow, and central nervous system). They believe the theory that the intestinal tract is of prime importance is undoubtedly correct, and that the abnormal formation of blood is the primary factor in the disease, whether the error lies in faulty elaboration or assimilation, or in toxin production and absorption from the gastrointestinal tract. The pathogenesis, symptoms, blood, and metabolic changes have been adequately dealt with, and numerous illustrations have been inserted, which cover various phases of the disease.

The description of the clinical course, complications, and prognosis of the disease has been well summarized from the important papers appearing in the medical literature, and, at the same time, the authors' own experiences have been freely drawn upon.

The section devoted to prophylaxis and treatment contains not only a review of the most important therapeutic agents employed in the past, but an admirable summary of the results obtained from the use of liver, extracts of liver, and related therapeutic agents.

In the appendix is included a review of the dietary requirements with numerous recipes which will be found useful.

Recent advances in our knowledge concerning the treatment of pernicious anemia and concerning many important factors relative to the etiology and pathogenesis of the disease indeed necessitate such a review. This edition may be used to advantage by the practitioner, teacher, and student.

MASSAGE. For Nurses and Beginners, by Maude Rawlins, Instructor of Massage to Nurses at St. John's Hospital. Eighteen illustrations. 140 pages. Stiff back binding, \$2.00. The C. V. Mosby Company, Publishers, St. Louis, U. S. A.

This is intended as a textbook in massaging for nurses, but somehow we are of the opinion that doctors scarcely

know enough about massage to instruct nurses as to when it should be used. If it is not beneath the dignity of the physician to use his hands, we would like to suggest that a great many ills of the Medical Profession as well as of the layman's body might be or rather might have been solved by the laying on of hands. Massage is certainly one of the oldest forms of therapy and is not unlikely one of the best in cases where it is indicated. We rub our arms when they ache; our faces when they are swollen; we scratch our skin when it itches and we use a dozen forms of massage quite instinctively. More is the pity that it has not been commonly recognized as a legitimate means of correcting pathological conditions, soothing pain and being generally useful. We should like very much to recommend this book, or at least some book for the consideration, not of the nursing profession particularly, but for the Medical Profession as well.

DOCTOR AND PATIENT. By Francis W. Peabody, M.D., Professor of Medicine, Harvard Medical School. Stiff back binding. 95 pages. The Macmillan Company, Publishers, New York. Price \$1.50.

Professor Peabody died about three years ago at the age of 46. Few men indeed have attained such prominence—he was Professor of Medicine at Harvard—at his age. The day before his death he wrote a letter which makes the last chapter in this little book. The other three chapters are papers that he had read on different occasions. The four short chapters have the following titles: "Public and Practitioner", "The Care of the Patient", "The Physician and the Laboratory", "The Soul of the Clinic". In this short space he has considered in a philosophical way practically all of the really big phases of the practice of Medicine. Every physician will be intimately interested in one or the other of these chapters because every physician has a relation to the public. Practicing physicians have to do with the care of the patient. Most physicians and all laboratory men will be much interested in the third chapter. Teachers of Medicine may ponder well the last chapter. For those who hold to the high ideals of the great Profession to which we belong, I recommend this book. Others would hardly understand what it is all about.

DOCTORS AND SPECIALISTS. A medical revue with a prologue and a good many scenes. By Morris Fishbein, M.D., Editor of the *Journal of the American Medical Association* and of *Hygeia*. With illustrations by Dan Layman. 118 pages. Cloth. Price \$1.00. The Bobbs-Merrill Company, Indianapolis, 1930.

As might be expected when one knows the author, this book is highly humorous, and every physician who has a sense of humor ought to procure a copy of this book for personal reading and afterwards turn it over to his friends or leave it on the reception room table of his office for others to read. Some super-sensitive medical men may take exception to the good-natured fun that is poked at them through the ever ready wit of the author, but in reality the humor is good-natured and should leave no stings. Every one who has anything to do with sick people or those who think they are sick comes in for consideration—even the nurse, the chiropractor and the Christian Science practitioner. It should furnish amusement to all classes of readers.

DISEASES OF THE EAR. By Philip D. Kerrison, M.D., consulting aural surgeon to the Manhattan Eye, Ear and Throat Hospital and to the Willard Parker Hospital for Infectious Diseases. 627 pages with 332 illustrations in text and two full pages in color. Fourth edition, revised and enlarged. Cloth. Price, \$7.50. J. B. Lippincott Company, Philadelphia and London, 1930.

As we have had occasion to say before, this is a very complete and satisfactory treatise on diseases of the ear. This fourth edition is revised and enlarged. In reality what the author has done is to bring a really good textbook thoroughly up-to-date, and that means very much when we consider that no branch of medicine has had

more notable advances during the past decade than otology. As in previous editions, the author has discussed the diseases of the labyrinth and suppurative lesions of the brain and meninges as an essential feature of the knowledge than an otologist must possess, and in the section devoted to operative surgery the very excellent plan of illustrating each successive step of the various operations has been adopted. In this last edition special effort has been made to bring the sections devoted to treatment of various aural lesions thoroughly up-to-date, and many of the chapters pertaining to operative treatment have been rewritten entirely. There may be some dissenting views concerning the therapeutic measures advocated, and yet with few exceptions the recommendations not only are thoroughly trustworthy but fall in line with the views of a majority of experienced and well-trained otologists. The author's aim to give greatest prominence to the practical side of otology has been eminently fulfilled. The book certainly will find ready acceptance among specialists as well as students, and general practitioners. We heartily commend it.

OSLER'S PRINCIPLES AND PRACTICE OF MEDICINE. Originally written by the late Sir William Osler, M.D., F. R. S., Eleventh edition, revised by Thomas McCræ, M.D., Fellow of the Royal College of Physicians, London; Professor of Medicine, Jefferson Medical College, Philadelphia. 1237 pages. Cloth. D. Appleton and Company, New York and London, 1930.

In 1892 the first edition of *Osler's Practice of Medicine* came from press, and at once was acclaimed as an authoritative textbook. For a period of thirty-eight years, during which eleven editions of the book have been issued, each being a revision of the former editions, the work has stood out as a leader, and its popularity has been undiminished. This eleventh edition, just from press, revised by Thomas McCræ, M.D., in every way maintains the well-deserved reputation of the work. The author well has said that it often is difficult to decide as to how much of the new has earned the right to displace the old, and he concludes by saying that the students should be given an account of what should be regarded as well-established knowledge. Much of the newer work may be old in the next five years, but an author would be derelict in duty if he did not bring his material up-to-date, and that is exactly what has been done, and most excellently. The book still is a handy work of reference for both student and practitioners, comprehensive and yet concise. A long list of new subjects have been incorporated and many chapters have been rewritten to meet present day standards. It really is superfluous to say anything more than to join in its general approval and say that the work is second to none.

CLINICAL NUTRITION AND FEEDING IN INFANCY AND CHILDHOOD. By I. Newton Kugelmass, M.D., Ph. D., Sc.D. Associate Attending Pediatrician, Fifth Avenue Hospital; Riverside Hospital; Pediatricist, Hospital for Ruptured and Crippled; Director, Heckscher Institute for Child Health. 345 pages. Illustrated. Cloth. Price \$6.00. J. B. Lippincott Company, Philadelphia, 1930.

This unusual book commands one's attention because it is not only a text book, but a reference work of great value. You have the outstanding things of interest in infant feeding and enough detail to completely cover the subject. The subject matter is placed in a new way, very interesting indeed. For example, one third of the book is devoted to Preventive Pediatrics; then a consideration of Alimentary Diseases followed by Deficiency Diseases, Metabolic Diseases and Convulsive Diseases; a consideration of Blood Diseases peculiar to children and that large group of Allergic conditions are given very complete, with the book concluding with the subject of Infectious Diseases. Of special interest is the chapter on epilepsy and an elaborate account of the method of employing the ketogenic diet in the management of epilepsy. A valuable chart concerning food values is at one's finger tips in the conclusion of the book.

A TEXTBOOK OF HISTOLOGY. By Harvey Ernest Jordan, A.M., Ph.D., Professor of Histology and Embryology, University of Virginia. 857 pages with 594 illustrations in the text and four plates. Cloth. D. Appleton and Company, New York and London, 1930.

In the various editions of his textbook in Histology, the author has constantly kept in mind the needs of the medical student. The content of the book is well suited for a foundation to the study of pathology. Although the book deals primarily with the structure of adult tissues and organs, embryological facts are frequently presented to aid the student in acquiring a proper conception of adult structure. The brief indications of function are helpful in maintaining the interests of the student.

In the fifth (last) edition most of the textual changes were made in connection with the chapters on blood and the endocrine organs.

As to the discussion of neuroglia certain objections might be raised in that it does not embody the researches made by Cojal and his pupils del Rio-Hortega and Achucarro.

PHYSIOLOGY AND BIOCHEMISTRY IN MODERN MEDICINE. By J. J. R. Macleod, M.D., LL.D., D.Sc., F.R.S., Regius Professor of Physiology in the University of Aberdeen, Scotland, etc. Assisted by Roy G. Pearce, A. C. Redfield, N. B. Taylor, J. M. D. Olmstead, and by others. Sixth edition, 1,074 pages, with 295 illustrations, including 9 plates in colors. Cloth. Price \$11.00. The C. V. Mosby Company, St. Louis, 1930.

In this book, the author, in addition to presenting the information found in the conventional textbook of physiology, attempts, as far as possible, to apply physiological knowledge to the field of clinical medicine. In this he succeeds admirably. This makes the book invaluable to the practitioner who has an adequate knowledge of physiology and who is interested in the physiological interpretation of disease. It is also valuable to the student of medicine in that it shows him certain practical applications of physiological facts and thus, possibly, makes the study of physiology more interesting and profitable to him. On the other hand, since application of physiological knowledge is uppermost in the author's mind certain sections which have no present application have been neglected. It is stated in the preface of this edition that these sections have been enlarged but in the reviewer's opinion they have not had adequate treatment, either in content or style, to make the book a suitable sole test for the medical student. However, the book should be invaluable in the clinical years, as a source of collateral reading.

The sections on the Physico-chemical Basis of Physiological Processes, the Circulation of the Blood, Respiration, Excretion of Urine and Metabolism are complete up to date, and exceedingly well done. In no other textbook of Physiology can be found such a complete discussion of these subjects. For example, much space is given to the methods of physiological experimentation and to clinical methods; the neutrality regulation in the body is clearly presented and discussed; the methods used in measurement of metabolism are given in full; shock is fully covered; considerable space is given to electro-cardiography and its clinical applications; carbohydrate metabolism is most completely considered.

The book is well illustrated. Two useful plates which strike one's eye while leafing through the book are those showing graphically the anatomical and functional distribution of the autonomic nervous system to each organ. Full references are given at the end of each section so that if it is desired to follow up or verify a statement the original sources may be easily located.

THE PRINCIPLES AND PRACTICE OF OBSTETRICS. By Joseph B. DeLee, A.M., M.D., Professor of Obstetrics

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BOOK REVIEWS

(Continued from page 608)

at Northwestern University Medical School; Obstetrician to the Chicago Lying-in Hospital, and Dispensary, etc. 1,128 illustrations. 1,140 pages. Fifth edition, thoroughly revised. Cloth. Price \$12.00. W. B. Saunders Company, Philadelphia and London, 1928.

This edition is fully up to the standard already set by this excellent text as one of the very best published in the English language. The author laments the fact that there is too much interference with the natural processes of labor by inefficient hands and in poorly equipped and manned hospitals. The high obstetric mortality and morbidity of small towns and the high mortality of childbirth in spite of more general hospitalization of the lying-in woman seem to the author to keep up because of the hospitalization. The text and illustrations have been fully revised, some obsolete pictures omitted and a large number of new ones added. The chapters on the treatment of eclampsia, hyperemesis, abruptio placentae, placenta previa, rupture uteri, postpartum hemorrhage, breech presentation, the operation of forceps, have been almost completely rewritten and new illustrations supplied. Changes have been made in the chapter on contracted pelvis and that on forceps much enlarged.

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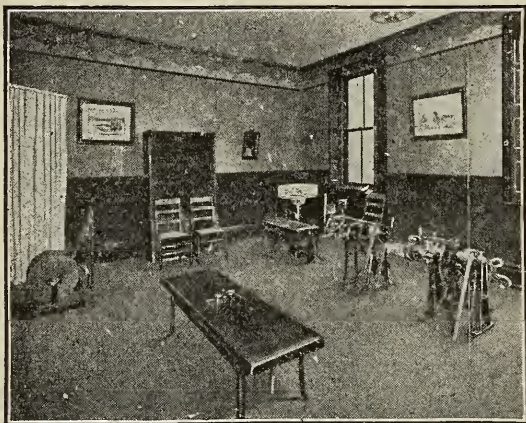


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TRUTH ABOUT MEDICINES

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The following products have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in New and Non-official Remedies:

AMYTAL.—Isoamylethylbarbituric acid.—Amytal differs from barbital (diethylbarbituric acid) in that one of the ethyl groups of barbital is replaced by an iso-amyl group. The actions and uses of amytal resemble those of barbital. It is proposed as a sedative and hypnotic in the control of insomnia and as a preliminary to surgical anesthesia. Amytal is also supplied in tablets containing 1½ grains. Amytal can be used before local or general anesthesia safely only by those who have had much experience and are familiar with the literature concerning such use. Eli Lilly & Co., Indianapolis.

PULVULES SODIUM AMYTAL, 3 GRAINS.—Gelatin capsules ("pulvules") each containing 0.2 Gm. (3 grains) of sodium amytal, the monosodium salt of isoamylethylbarbituric acid. The actions and uses of Pulvules Sodium Amytal, 3 grains, resemble those of barbital. The product is proposed as a sedative and hypnotic in the control of insomnia and as a preliminary to surgical anesthesia. Pulvules Sodium Amytal, 3 grains can be used before local or general anesthesia safely only by those who have had much experience and are familiar with the literature concerning such use. The pulvules may be administered by mouth or rectally. Eli Lilly & Co., Indianapolis. (*Jour. A. M. A.*, October 18, 1930, p. 1178)

FOODS

The following products have been accepted by the Committee on Foods of the Council on Pharmacy and

Chemistry of the American Medical Association for inclusion in Accepted Foods:

ARGO CORN STARCH (Corn Products Refining Co., New York). A refined corn starch of high purity. It contains 86.95 per cent of starch. It yields 3.50 calories per Gm. (99.4 per ounce). Argo Corn Starch is proposed for use in puddings, custards, ice cream, a wide variety of desserts, in bakery products, and for thickening gravies, sauces, pie filling, stewed fruits, etc.

DROMEDARY GOLDEN DATES, PITTED AND PLAIN (The Hills Brothers Co., New York). Pasteurized pitted or plain Mesopotamian dates in cartons. Selected Mesopotamian dates, pitted or plain, are washed, and pasteurized in ovens so that nonsporulating bacteria will not survive the treatment. Pits constitute 12.8 per cent of plain dates. The pitted dates contain protein, 1.7 per cent; fat, 1.9 per cent; total carbohydrates 73.0 per cent. Pitted dates yield 3.16 calories per Gm. (89.7 per ounce). It is claimed that the pasteurization makes these dates a safe food; they are an easily digested energy food for children and adults. (*Jour. A. M. A.*, October 18, 1930, p. 1179)

PROPAGANDA FOR REFORM

INCREASED POTENCY OF VIOSTEROL PREPARATIONS.—The Wisconsin Alumni Research Foundation informed the Council on Pharmacy and Chemistry that the accumulated clinical experience with viosterol has shown that better results in the treatment of rickets are secured when a dosage of vitamin D is used larger than that originally recommended and that the maximum limits of safety as to the amount of vitamin D that can be used has now been more definitely determined than was the case when preparations of viosterol were first put

(Continued on adv page xxiv)



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TRUTH ABOUT MEDICINES

(Continued from adv page xxii)

on the market. Instead of increasing the dosage of the present products, the Foundation and its licensees determined to increase the potency of the preparations. It was decided to increase the potency of viosterol in oil so that instead of having 100 times the vitamin D potency of a standard cod liver oil as determined on rats by the Steenbock line test, it shall have 250 times that potency, and, provided the Council should agree to increase the potency of cod liver oil with viosterol so that instead of having 5 times the potency of a standard cod liver oil as determined on rats by the Steenbock line test, it shall have 10 times that potency. The Foundation announced that these preparations of increased potency would be placed on the market beginning with October first. The Council on Pharmacy and Chemistry announces that it has accepted the changes of potency determined on by the Foundation and has changed the name of viosterol in oil 100 D to viosterol in oil 250 D and the name of cod liver oil with viosterol 5 D to cod liver oil with viosterol 10 D and has continued the acceptance of the viosterol preparations already accepted, under the new names. (*Jour. A. M. A.*, October 4, 1930, p. 1021)

HYPERVITAMINOSIS WITH VITAMIN D.—The uncertainty as to the possible toxicity of an agent so uniquely potent as viosterol (irradiated ergosterol) awakened misgivings regarding the desirability of advocating its widespread use. These misgivings prompted the limitation of the recommended dosage within modest bounds. The pendulum of dosage had swung so far in the direction of caution that it now seems advisable to increase somewhat the concentration of viosterol in oil and in cod liver oil with viosterol and accordingly the Council on Pharmacy

and Chemistry reports that preparations of viosterol in oil formerly having 100 times the vitamin D potency of a standard cod liver oil as determined on rats by the Steenbock line test are increased to 250 times that potency, and that the preparations of cod liver oil with viosterol formerly having 5 times the vitamin D potency of a standard cod liver oil as determined on rats by the Steenbock line test are increased to 10 times that potency. (*Jour. A. M. A.*, October 4, 1930, p. 1023)

ORAL IMMUNIZATION AGAINST PNEUMOCOCCI.—Thus far, laboratory studies concerning oral immunization against specific infections have not been encouraging. Most of the suggested oral vaccines apparently are rapidly destroyed or denatured in the gastro-intestinal tract. Oral immunization will presumably be limited to the relatively few vaccines sufficiently resistant to gastro-intestinal denaturation. The most resistant group of microorganisms are apparently the pneumococci. Recently, successful oral vaccines against pneumococci are reported to have been developed by Dr. Victor Ross. It is to be hoped that Ross's encouraging researches will not be handicapped by premature clinical or commercial exploitation. (*Jour. A. M. A.*, October 4, 1930, p. 1024)

THE STROOPAL FRAUD.—For many years a nostrum known as Stroopal has been sold on both sides of the Atlantic as a cure for cancer. The product apparently originated in Germany. For some years it was exploited from London and was exposed by *London Truth* nearly twenty years ago. According to Gehe's Codex, Stroopal is composed of the powdered leaves of *Teucrium Scordium*, otherwise known as water germander or wood garlic. For at least seventeen years Stroopal has been exploited in a small way from Chicago. Recently, Stroopal seems to have been advertised under the name of the Stroopal Company, 2101 Belmont Ave., Chicago. On August 13, the postal authorities issued a fraud order against the Stroopal Company and notified the

(Continued on adv page xxv)

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TRUTH ABOUT MEDICINES

(Continued from adv page xxiv)

Chicago postmaster to return all letters addressed to the Stroop Company to the original senders. (*Jour. A. M. A.*, October 4, 1930, p. 1037)

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the Food and Drug Administration of the United States Department of Agriculture which enforces the Federal Food and Drugs Act: Schieffelin Cold and Grippe Tablets (Schieffelin and Company), containing acetanilide, cinchona alkaloids, red pepper, camphor, aloin and extracts of plant drugs, including a laxative drug. Mendenhall's Chill and Fever Tonic (J. C. Mendenhall Medicine Co.), consisting essentially of quinidine sulphate, a laxative plant drug extractive, glycerine, alcohol, sugar, water and a trace of benzoate of soda. Goodwin's Cold Breakers (Senoret Chemical Co.), tablets containing acetanilide, aloin, strychnine and a laxative plant drug. Sternox (Sterno Corporation), essentially petrolatum with small amounts of camphor, menthol, turpentine, thyme and eucalyptus oils. (*Jour. A. M. A.*, October 4, 1930, p. 1038)

THE PAVIA "CANCER CURE".—During the past year, editors of newspapers and magazines have received from one Burroughs F. Perry of 221 Shoreland Arcade, Miami, Florida, a piece of mimeographed publicity material headed, "Cancer and Goiter Cure Is Asserted". The statement is to the effect that one Charles Pavia has discovered a wonderful cure for cancer and goiter. Further, according to Mr. Perry's material, the Pavia formula "feeds the cancer germs, satisfies it and destroys it by self satisfaction". The main exploiter of Pavia's remedy seems to be one R. B. Fisher, whose stationery announces him to be an attorney; he, too, does business from 221 Shoreland Arcade, Miami. At the request

of Pavia and Fisher, Dr. Charles D. Cleghorn, president of the Dade County (Miami, Fla.) Medical Association, checked up on cases treated with the Pavia remedy and reported that in three cases examined the treatment had been quite without effect. Dr. Cleghorn reports that the description of the formula, as given him, was "vegetable oils, camphor, menthol and turpentine in a base of animal fats". Chemists of the A. M. A. Chemical Laboratory reported that the remedy was a brownish-yellow ointment with a terebinthinate odor, indicating the presence of turpentine, menthol and camphor. It may well be that Mr. Pavia is sincere in his exploitation of the remedy. However, a worthless cancer remedy sincerely exploited may prove just as fatal as the crudest of cancer cure swindles. (*Jour. A. M. A.*, October 11, 1930, p. 1116)

ORAL USE OF OVARIAN PRODUCTS IN MENOPAUSE.—Rational as ovarian therapy may theoretically appear to be in some conditions, the actual results are rarely striking and often nil to the careful observer. Extensive clinical experience has failed to establish the value of the desiccated preparations administered orally. The Council on Pharmacy and Chemistry has omitted all desiccated ovary preparations for oral administration because long extended clinical use has failed to demonstrate the efficacy of the marketed brands. (*Jour. A. M. A.*, October 11, 1930, p. 1119)

HAMMOND'S MIXTURE.—The formula for Hammond's mixture is: pepsin (scale) 12; wood charcoal U. S. P. 24; potassium bromide, 64; water to make 250. Pepsin is seldom indicated, because the gastric juice usually contains sufficient pepsin for gastric digestion. Charcoal has long been administered in cases of flatulence, the prescribers evidently losing sight of the fact that when thoroughly wet it loses its property of absorbing gases. In view of these two facts, it would appear that the prescription would likely do no more than would a solution of potassium bromide itself. (*Jour. A. M. A.*, October 11, 1930, p. 1119)

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